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ART. I.—*Clinical Observations in Private Practice.* By Dr. E. B. HASKINS, of Clarksville, Tenn.

(CONTINUED FROM PAGE 10.)

OBSERVATION III.—*Four Cases of Cerebral Disturbance, connected with Enlargement of the Spleen.*

CASE I.—On the 14th of October, 1842, I was summoned to see a young gentleman, about 18 years of age, well grown, and of a good constitution. He had been the subject of intermittent fever during the past summer, and up to near the time of the present attack. The chills had been, from time to time, arrested by quinine, but they would soon make their appearance again.

He had never kept his bed longer than a day or two at a time, and his general health was not thought to be impaired. On arriving, I was informed that the patient had had a fit; that he had fallen, insensible, after a hear-

ty supper; that his feet were placed in warm water, and in five or ten minutes consciousness was restored; no convulsions. I found the young man lying on his back; knees slightly flexed; countenance dull and inexpressive; listless—could with difficulty arouse the mind sufficiently to procure answers to questions; respiration slow and heaving; pulse slow and rather full; complains of no pain. On applying the hand to the abdomen, a tumor was felt occupying the left hypochondrium, extending from the cartilages of the ribs half way to crest of ilium, below, and quite to the *linea alba*, in front. The surface of the tumor was even, and gave a flat sound to percussion. Venesection to twelve ounces, four dry cups over the tumor, and a brisk cathartic, constituted the treatment for the time.

This case fell into other hands, and I do not know the treatment pursued; he recovered, however, after several months' confinement.

Case II.—J. H., male subject, aged about 16 years, of spare frame, but of general good health, was attacked to-day (August 1, 1846,) with a fit, on account of which I was called. The "fit" consisted in falling and remaining insensible for a few minutes, and waking up alarmed. He has had chills during the preceding summer and latter spring months, for which he has taken largely of quinine; has lost flesh, and become pale; appetite good; has continued to exercise freely.

Present symptoms—one hour after seizure: Decubitus dorsal; legs extended; skin pale; countenance inexpressive; tongue clean and moist; pulse slow and natural in volume; respiration slow; dullness of mind, answering questions with great hesitation; great dread of dying.

On examination, the spleen was found much enlarged, firm and yielding a flat sound on percussion; no pain on pressure; bowels confined. Calomel grs. v, followed in

five hours by a dose of castor oil; hot fomentations over the entire region of the belly.

August 2d.—Medicine has produced several motions from the bowels; patient feels much relieved; condition of spleen the same. He was now put upon the following mixture*—a tablespoonful twice a day, morning and noon—

℞. Ferri sulph., ℈j,
Pulv. columb., }
Pulv. rhei, } ää ʒj,
Zinzib., }
Extr. cinchonæ, ʒss,
Tinct. aloes socot. f., ʒij,
Aq. cinnam. f. ʒvij. Misce;

together with dry friction over the left hypochondriac region morning and night. This case went on to rapid recovery. The chills disappeared in a fortnight; the spleen gradually reduced; color returned to the skin; and in six weeks health was restored.

Case 3.—J. M., ferryman, about 28 years of age, of fine constitution and stout frame; has been the subject of chills for the last two months, for which he had taken several large doses of quinine, and some purgative medicines; has not ceased to labor, except for a few hours at a time; appetite has been very good; was taken to-day, July 9th, 1848, with great prostration of strength and "strange feelings." Decubitus dorsal; knees flexed; pulse slow and rather feeble; respiration slow and labored—more a succession of deep sighs; countenance vacant; eyes fixed upon some object, with disinclination to remove them; attention difficult to arouse; answers questions slowly and with hesitation; says he would cease to

*A modification of the "spleen mixture" so highly recommended by Mr. Twining in vascular engorgement of the spleen.—*See Diseases of the Liver and Spleen, by William Twining.*

breathe if he were to fall asleep, that he has to breathe by effort of will; does not know where he is, but knows his family and physician. On conducting further examination by palpation, the spleen was found much enlarged and tender to firm pressure; tongue white and coated, bowels constipated. About five ounces of blood taken by cups from left hypochondrium; warm fomentations over entire abdomen; half dozen pills of comp. ext. of colocynth.

July 10th. Bowels have been freely moved, and patient feels better. The modified spleen mixture was ordered as in case second, with hot fomentations to belly twice a day. Health was restored in five or six weeks.

Case IV.—September 5th, 1849, I was summoned to see a little boy, abont 4 years old, who has had frequent attacks of intermittent fever during the past summer, which were always arrested by quinine, but would recur again in a week or two; general health but little impaired; appetite has been good, and was playful up to the time of the present seizure. I was told by his parents that he had had a "worm fit;" that soon after a hearty dinner he lay down, and as he fell asleep he was taken with the fit; some distortion of features, spasms of the extremities and muscles of the neck, with stertorous breathing; that he was bathed about the face and neck with spirits of camphor; his feet were rubbed, and in a few minutes the "fit went off." I found him lying in his mother's lap, dozing; face pale; respiration natural, except frequent sighing; pulse rather increased in frequency; temperature natural; condition of bowels not known; when aroused speaks hurriedly, and with agitation, but soon falls again to dozing. Abdomen tumid; spleen distinctly felt enlarged, firm, and pressure excited no manifestations of tenderness. He was placed in a warm bath up to the hips; a dose of castor oil and

spirits of turpentine was given; and flannel wrung out of hot brandy was applied to the abdomen.

The bath was directed to be used once a day, and a teaspoonful of the spleen mixture twice a day. I did not see this case again until late in the fall, when it was entirely restored to health.

Reflections.—I do not remember to have seen, anywhere, such phenomena as are detailed in this Observation, ascribed to enlargement of the spleen. It is true, Andral (Med. Clinic) has recorded two cases of apoplexy in which the spleen was found enlarged, and another where it was very *small* and *dense;* but in all three of his cases the heart was hypertrophied—a more obvious cause of the cerebral affection. Louis* has "examined many subjects who died suddenly, and in an unexpected manner, without being able to decide upon the cause of death from the state of the organs, I (he) always found the spleen very small." What influence, if any, the spleen may have exercised in the production of the sudden and unexpected seizures in those cases observed by Louis, as well as these here recorded, I will not attempt to define, as every thing on this subject could only be received in the light of hypothesis, whilst the physiological relations of that organ are so imperfectly understood. It may not be out of place, however, to remark that the very opposite conditions of *enlargement* and *diminution* of an organ, are not incompatible with *identity* of pathological influence; for an enlargement of the liver, and a certain species of atrophy of that organ (cirrhosis) may alike cause ascites.

It has for a long time been known that apoplexy and palsy are very prevalent in certain marshy districts.

*Louis on Typhoid Fever, translated by H. J. Bowditch, M.D.

May not the spleen, in those cases, have been found in a pathological state? The fact that that organ is more *specifically* affected in protracted intermittents, favors at least an affirmative supposition. If the cases detailed in this paper be regarded as apoplectic, they were certainly comparatively light, and would come under the head of what some writers term *transient* or *fugitive* apoplexy. That the state of the spleen and the cerebral phenomena in these cases, stand related as *cause* and *effect*, derives support from the fact, that treatment was directed alone to that organ, and that no recurrence of seizure took place, but, on the contrary, convalescence ensued.

Have other physicians observed similar cases? If they have, I trust they will report them. I know that the attention of *young and inexperienced* physicians is liable to be more exclusively occupied with the organ that presents the most evident signs of disease, and that the *older* members of the profession, relying upon their sagacity, often diagnose hurriedly and without due examination; whilst *all* who do not preserve notes of their cases, may observe similar ones at too distant periods to be connected in the memory, and each individual case is passed over as simply a coincidence; and thus it is obvious that cases of great interest may be wholly lost to the profession. That physicians of age, experience, and *secure local reputation* are very prone to fall into the habit of hasty and careless examinations, is a truth that cannot be too often presented to the minds of those young men who desire to escape the mortification and odium of blunders in diagnosis, and perhaps fatal errors in treatment.

I will further remark, (and beg pardon in advance for this digression), that in protracted chills — after they have assumed a chronic form—I have never found qui-

nine to restore the health of the patient. I have for several years, in such cases, used the mixture, (as used in the last three cases) with decided success. I prescribe its daily use without regard to the chill, and as the health is restored the chills disappear.

(To be continued.)

ART. II. — Translations from *Archives Generales de Medicine*, for December, 1850. Translated by WM. H. COBB, M.D., of Louisville, Ky.

M. Fuster, a Professor in the Medical Faculty of Montpellier, sent to the Academy of Medicine, on the 19th of November, a communication upon arsenical medication in intermittent fever. This communication resolves itself into the following propositions:

1st. Inveterate cases of intermittent fever, even when proving rebellious to the use of quinine, yield readly to the exhibition of arsenic.

2d. If the arsenic prove inefficient in producing a cure, quinine invariably proves remedial.

We commence, in this variety of fevers, with five centigrammes of the arsenic acid, taken three times during the day, and increase the dose according to the indications to nine or ten centigrammes. The best formula for its administration, whether it be exhibited by the mouth or given in the form of enema, is to incorporate it with twenty times its bulk of sugar of milk as soon as the disease has been subdued, the dose is to be diminished in the same ratio that it was increased, until the initial dose be attained. No bad effects attend its use; the medicine is generally well borne by the sick. In the regions of country south of Montpellier, emetics, given at the commencement and in the course of the

treatment, favor, maintain or rëestablish the tolerance of the acid.

No special regimen is required, except on those days that the emetics are administered. The visceral engorgements attendant upon the fever are never resolved as speedily as the disease itself, they only diminish, and finally disappear, after the general health has been permanently rëestablished.

Dr. Aran, physician to the central office of the Hospitals, presented a paper upon "the local use of Anæsthetic Agents," and more especially upon the relative value of anæsthetic agents with a view to this medication. The following are the conclusions at which he arrived:

1st. All volatile substances which we recognize as possessing general anæsthetic properties (the different varieties of ether, chloroform, Dutch oil, or chloruret of olefiant gas, aldehyd, benzoin) also possess local anæsthetic powers when applied endermically.

2d. The intensity of their local anæsthetic power is not in proportion to their general effect, but rather in an inverse ratio to it. This is the explanation of the fact that, when considered with a view to its local anæsthesia, Dutch oil exceeds all the aforementioned substances, that chloroform is superior to the ethers, and that acetic ether surpasses the other kinds of ether.

3d. Of the different anæsthetic agents, some, as the ethers, aldehyd and benzoin, can be applied to the skin, even in an undiluted form, without producing any irritation; while others, on the contrary, possess an acrimony which render them more or less irritating, chloroform, even when of the purest form, is of this class; when applied in small quantity, it causes a slight sensation of warmth, which gradually increases to a sensation of extreme heat, and even determines vesication if the

contact be prolonged, or the quantity of chloroform poured upon the skin be at all considerable. This irritating action is developed in a more energetic manner if the evaporation of the chloroform from the surface where it was applied, be allowed to proceed freely. The Dutch oil also possesses irritating properties but to a much less extent.

4th. As before stated, the best of all the anæsthetics, with a view to their local application, is the Dutch oil, or chloruret of olefiant gas; its anæsthetic action continues longer even when employed in small quantities, from fifteen to twenty drops, upon the painful surface; it produces but a very insignificant amount of cutaneous irritation; whereas chloroform induces heat and pain. The former has an ethereal odor, slight and rather agreeable than otherwise; while on the other hand, the ethers, aldehyd and benzoin, possess a pungent odor, which is illy borne by the sick; aldehyd and benzoin, in particular, have a very disagreeable smell when concentrated. The only objection to the introduction of the Dutch oil into general use is that in the present state of its manufacture, its price is very dear; but the opinion seems to be generally entertained, that in a short time its price will be reduced to the same as that of chloroform.

5th. In order to obtain sufficient local anæsthesia, it is not at all necessary to employ a large quantity; with from 15 to 20 gtts., at the farthest, of the Dutch oil poured upon the part affected, and covered with a wet compress and a piece of oilcloth, we can allay the pain, in the greater number of cases indicating the use of anæsthetic agents.

At the same session of the Academy of Medicine, a memoir was read by Dr. Sestier, upon "Intra-laryngeal œdema, and œdema affecting the back part of the mouth.

supervening in cases of œdematous laryngitis." The author has collected 41 cases of œdematous laryngitis with œdema of the interior of the larynx; the œdema was sometimes general, (in 23 cases), sometimes partial, (in 18 cases). But whether it be general or partial, it almost invariably affects the vocal chords, causing a contraction of the glottis. This lesion is met with quite frequently in œdematous laryngitis, in about four-sevenths of the cases. It is important to consider this affection, because it tends to obscure the diagnosis of œdematous laryngitis, by substituting for the characteristic contrast of expiration and inspiration, a difficulty of breathing, because it aggravates the dangers already attendant upon the disease from the infiltration of the superior folds of the mucous membrane of this organ; and especially with a view to its treatment, as it renders the necessity for bronchotomy more necessary than when the superior folds are alone infiltrated.

Relative to the diagnosis of intra-laryngeal œdema, the author imposes the following conditions:

1st. Pay attention to the state of the patient preceding the attack, inasmuch as œdema within the larynx has only been clearly proved to exist when the patient was more or less gravely affected prior to the onset of the disease.

2d. Examine the etiological form of the disease, as intra-laryngeal œdema has never been observed when the affection of the larynx has been consequent upon inflammation of the throat, occurring in an individual previously enjoying good health, but very rarely in œdematious angina superadded to general inflammation, or in the case of a serous diathesis more or less advanced and indicated by anasarca or other serous effusion. The presence of laryngitis, whether it be acute, subacute or chronic, would lead us to suspect that the interior of the larynx is invaded by the œdema, as occurs in three-

sevenths of the cases. The supposition is rendered the more probable if the angina be connected with a serous diathesis; the proportion being three-fifths of the cases.

3d. Observe whether the contrast between the difficulty of inspiration and the facility of expiration exists or not; for in seven-twelfths of the cases in which this marked difference did not exist, still the œdema affected the interior of the larynx.

4th. Finally, inspect with care the back part of the mouth and assure yourself whether this region is infiltrated or not; for in twelve examinations of œdematous angina, with œdema extending more or less from the throat; intra-laryngeal effusion existed eleven times.

The œdema of the back of the mouth is sometimes general, sometimes partial; if it be partial, it may be confined to so small a space as to require a very minute and attentive examination to discover it. The uvula is most frequently affected; then come, in the order of their frequency, the soft palate, base of the tongue, pillars of the palate, sides of the cheeks, tonsils, glosso-epiglotic fold, pharynx, and lastly, the palatine arch. The infiltration of the back part of the mouth often presents the character of phlegmonous œdema; the infiltrated liquid is sometimes situated deeply in the submucous cellular tissue, sometimes almost beneath the epithelium; in which case the œdematous portion presents the appearance of a distended vesicle, vesicular polypus, or phlyctæna. Œdema at the posterior part of the mouth has been noticed in one-fourth of the cases. It is very frequent in œdematous angina consequent upon acute inflammation of the throat, but it appears more especially in the cases of angina occurring during the course of anasarca or general dropsy. It is important to consider this œdema, because it may enable us to prevent the subsequent invasion of œdematous laryngitis, to discover it at its first onset by giving a

special significance to the slight gutteral and laryngeal symptoms which so obscurely mark the first moments of the affection, to facilitate the diagnosis after its complete development, and finally to guide us in the choice of our therapeutic means. The author particularly recommends, among other direct means likely to prove successful, scarifications or incisions into the infiltrated parts. These scarifications, according to the author, may be very useful, if the laryngeal infiltration depend upon any obstacle to the venous circulation, having for its seat the heart or the course of the large cervical veins, or when dependent upon anasarca consecutive to scarlatina or miliary fever, upon a dropsical cachexy supervening upon repeated attacks of intermittent fever, upon scorbutic or cancerous affections; in the case of laryngeal œdema supervening immediately or after a short time upon wounds of the neck, with serous infiltration into the cellular tissue around the larynx. The chances of success are notably less if the laryngeal œdema be symptomatic of a very slight inflammation of the throat or larynx, or consecutive to a chronic laryngitis. The chances are almost nothing if the laryngeal inflammaton be owing to an acute and intense inflammation of the throat and larynx. At all times, it is probable that, even in this last form of the disease, scarifications would succeed, if resorted to in the first moments of the formation of the inflammatory œdema, because at that period we sometimes find merely a limpid serosity soon to be replaced by plastic lymph.

Dr. A. Mayer, of Belfort, addressed to the Academy of Medicine, November 26th, a memoir entitled, "The use of multiple scarification of the neck of the uterus, effected by means of a new instrument, in the treatment of leucorrhea symptomatic of uterine engorgement."—The author proposes to establish in this memoir,

1st. That there exists a variety of leucorrhea symptomatic of acute or chronic engorgement of the womb or of the neck alone.

2d. That this variety, rebellious under the usual modes of treatment, requires local sanguineous depletions.

3d. That leeches applied at a distance from the neck are inefficient, and that their application to the neck itself is attended with so much difficulty, that this method has fallen into disuse.

4th. That it is possible to substitute, for the local action of the leech, numerous scarifications of the external surface of the cervix uteri.

5th. That an instrument specially adapted to this organ, and rendering the operation much easier of execution, merits the attention of practitioners, and a rank in the treatment of an affection often rebellious to every other form of treatment.

SELECTIONS

FROM

FOREIGN AND HOME MEDICAL JOURNALS.

On the Exhibition of Quinine in the Febrile Paroxysm. By Otis F. Manson, M.D., of Granville co., N. C.—The introduction of quinine as a remedy in the treatment of remittent fever, *given in the remission*, was perhaps coeval with its discovery as one of the constituents of cinchona, the bark itself having been used in that stage of the disease by Lind, Senac, Clark, Balfour and others, anterior to its disintegration; but it was perhaps not more than twenty-five years ago that this salt was administered in the exacerbation, and at this time the practice is almost exclusively confined, in our own country, to the extreme southern and western States.

A number of my professional friends in Virginia and North Carolina having adopted this plan of treatment, at my suggestion, I have felt it my duty, in compliance with their solicitations, to place within their reach all of the knowledge I possess on the subject, drawn from my own experience and many others; and I therefore embrace the opportunity to do so, offered by your flattering invitation to contribute to the pages of your journal.

Remitting fever has for many years assumed a congestive character, in the vast majority of instances being attended with the periodical recurrence of a stage of congestion, commonly termed chill; this stage being characterized by a diminution of temperature, varying from a slight coldness at the tips of the nose, fingers, and toes, to a fearful frigidity of the whole extremities,

and in some few instances a death-like coldness of the whole surface of the body; these latter cases being termed, *par excellence*, "congestive fever."

Although in many instances this stage is not manifested after the initial chill, by any discernable reduction of temperature in any part of the body for several days, yet it sooner or later becomes apparent to the touch of the attendant, although unfelt by the patient, who, instead of experiencing any sensation of cold, is oppressed with intense heat and unquenchable thirst; indeed, we have often discovered the presence of this stage by the increased urgency of this thirst and desire for removal of the clothing.

At the same time that this coldness of the extreme parts is perceived, *the rest of the body is of high febrile heat;* the pulse quick, frequent and small, the breathing laborious, deep sighing, oppression at the præcordia, pain in the head, loins and limbs, anxiety, nausea and vomiting.

After a lapse of time, varying according to the violence of the attack, but averaging about an hour, this stage terminates in the exacerbation, the heat becomes now diffused over the whole surface, the pulse becomes diminished in frequency, and increased in fulness and force, the pains and thirst still continuing, occasionally, though not commonly attended with delirium and other indications of cerebral disturbance; pain on pressure of any of the abdominal regions not generally present in the first exacerbation, but more apparent as the disease advances, especially in the epigastric region. This stage, after a lapse of 24 or 48 hours, according to the type of the disease, is succeeded by a recurrence of the stage of congestion; the tongue now becomes sensibly altered, but so variable in appearance that no particular description will apply to it. Evidences of organic irritation in the great cavities, particularly of the stomach, bowels and liver, now become more apparent, and the abdomen becomes tense, tender, and in some cases meteoric. From the fifth to the fifteenth day, the disease terminates, without aid, in 1st, intermittent fever; 2d, fever of a more continued character; 3d, death.

I have deemed it necessary to give this brief description of this disease as it usually appears in my field of

observation, in order that the following remarks may be fully understood, as the object of the article is chiefly to display the effects of quinine in this disease.

Given in free and full doses of from twenty to thirty grains in the exacerbation, quinine reduces the pulse in frequency, fulness and force; it removes local determination to the head, chest and abdomen, thereby relieving pain, restlessness, nausea, vomiting and diarrhœa, producing generally a copious, warm diaphoresis, and, in short, to expel fever and

——— "all its dire attendant train,"

safely, surely and expeditiously, in a period of time varying from four to ten hours from its administration.

But along with the employment of quinine the following means are resorted to:

Called to a patient in the exacerbation, venesection is practised in every case where the pulse will justify it, but it is rarely that this is called for. In fact, the general experience of myself and *confreres* is adverse to the use of the lancet in this affection; the pulse, though often full, and apparently tense, is generally *compressible*. Local bleeding by cups and leeches will usually be sufficient, and if there is tenderness on abdominal pressure, or other symptoms of visceral implication, these should be freely applied. Should symptoms of cerebral irritation be present, a copious flow of blood will be obtained by cups to the mastoidal regions.

This is to be immediately followed by a cathartic dose of calomel, say twenty grains, and in three hours thereafter by twenty grains of quinine, diffused in a wineglassfull of cold water, and if the febrile excitement is intense, thirty grains may be given, but twenty grains will in almost every instance be sufficient for the first dose. Four hours are now suffered to elapse, during which the local bleeding is continued, if required. In this time, in a vast majority of instances, the fever will be considerably reduced, when the quinine should be repeated in doses of six to ten grains every four hours, until thirty-five or forty grains are taken. If in four hours after the first dose has been taken the fever has not sensibly declined, the large dose (twenty grains) may be repeated; but in many hundred cases the first dose has seldom failed in that time to

produce an evident declension of the fever, rendering the after employment of the medicine, in doses of six to ten grains, amply sufficient to effect a complete solution of the disease, the great aim being to throw into the system at least thirty-five or forty grains before the period for the recurrence of the next paroxysm.

In cases attended with obstinate vomiting the stomach should be previously calmed by the administration of forty or fifty drops of laudanum, and if this should be rejected the laudanum may be given by the rectum in double that quantity. But if the gastric irritability should not yield to the anodyne, after local depletion also has been employed as before advised, (and in some cases the stomach will not bear the presence of any medicine long enough to induce its effects,) the quinine must be given by the rectum. One drachm of quinine should be suspended in four ounces of mucilage of gum arabic or thin starch, and given at once as an enema; to be repeated at the same intervals as *per orum*, and in thrice the quantity above recommended.

If, however, the stomach will bear the quinine for an hour, the nausea and vomiting will in almost every instance cease.

In some few instances, although the foregoing treatment has been adopted, a slight exacerbation may be perceived towards the next evening; but this will generally be of brief duration, and will be followed by a complete intermission, when the quinine may be given in doses of ten grains every morning for three or four days.

Although I have described the effect of large doses of quinine in this disease, it will be perceived that I have not proposed to give any name to the group of sequences induced by its action, for the reason that no single term yet designated will denote its peculiar properties; but the term "sedative," approximates more nearly to its proper designation than any other, and has generally been adopted by the advocates of its employment.

I could fill the pages of your journal with extracts from the writings of distinguished physicians of our own country to corroborate what I have stated, but, instead of doing so, must refer the skeptic to our Southern and Western journals.

To those who have observed the action of this remedy in the different modes and various conditions of the system in which it is administered, the inference is irresistible, but its effects are solely dependent upon its salutary action upon the nervous system. This effect is so often immediate, arresting the disease at once, before it could be *absorbed in the blood, or resolve inflammation*, that we are compelled to regard its action as purely nervous. Now if it be contended that this fever is merely symptomatic of gastro-enteric lesion, none will surely argue with Broussais that quinine arrests the febrile movement by its local application to the inflamed surface; that it has any power to effect this, has never been demonstrated, and is opposed to the experience of all. Or if it be contended with Liebig, that in fever some of the elements of the brain are removed which are supplied by the alkaloids of bark, &c., we may reply, that prior to this restoration of the lost elements of the cerebral substance, the agents have to be subjected to the functions of absorption and nutrition, both so imperfectly conducted amid febrile excitement, and for the performance of which a far greater period of time is necessary, even in health, than is amply sufficient for the sanatory action of quinine. These conflicting, but ingenious theories of two great minds, only serve to make the "darkness visible" that surrounds the essential nature of disease and its remedies.

The effect of quinine upon the pulse is one of the most remarkable of its powers in this disease. I have reduced the pulse from 140 and 150 pulsations in a minute to its normal standard in six hours. Indeed, I have in several cases desisted from its continuance, for fear that its sedative effect might be carried too far. The organic lesions, therefore, so often developed in the course of this fever, so far from contra-indicating its use, are certainly relieved by it, or their cure accelerated. Where blood-letting, both general and local, assisted by the other usual antiphlogistic measures, have failed in arresting cerebral inflammation, quinine in a few hours completely arrested the progress of the disease, reducing the pulse, calming delirium, promoting free diaphoresis, and inducing sleep, from which the patient would awake to speedy convalescence, quinine would seem to effect this by allaying the morbid excitement of the nervous system, upon which

this increased action of the heart and arteries is dependent, and from the continued excitement of which the organic lesions developed would seem to arise.

It will need but a short experience with this article to convince the careful observer that it possesses the power of allaying nervous irritation, spasm and pain. Neuralgia, whether intermittent or continued, will almost invariably yield to its sedative and anodyne properties.

Those to whom the facts and views herein set forth are entirely novel, may here enquire, "If there is no *danger* in administering quinine during febrile and inflammatory excitement?" Confining my reply to this disease, I unhesitatingly answer, "That there is no danger when given in full and free doses, in the manner which I have indicated!" They may also enquire, "Have all authors on therapeutics committed an error in classing quinine amongst the excitants, in fact, as the first and most valuable of tonics?" To which I reply, that all the standard authorities on this subject I believe to be perfectly correct; but their knowledge of quinine is confined to its tonic, stimulant and antiperiodic character, as it assuredly is in small, repeated doses, but given in large doses it produces the effects I have described; and therefore not only admissible, but indispensable where small doses would not only be improper but pernicious. I speak from great experience with this article. I have given 60 ounces in one fall, (1846,) and I here declare my belief that armed with this agent, remitting fever, if attacked early, is as certainly and completely under its control as ague. I have given it in the chill, the height of the paroxysm and its decline, complicated with indisputable evidences of lesion of the cerebral and abdominal organs without any injurious effect in any case; and to sum up in few words, the sulphate of quinine in full doses allays pain, irregular nervous action and restlessness, diminishes the pulse in frequency, fullness and force, removes local determination and equalizes the circulation, by allaying that morbid excitement of the nervous system upon which remitting fever depends, and consequently relieves the local lesions arising from this exalted action of the circulation.

"Hæc certamina tanta
Pulveris exigini factu compresa quiescunt."

Treatment of Strumous Disorders by means of Preparation of Leaves of Walnut. By Dr. Negrier, Physician at Angers. — [Dr. Negrier has published two memoirs, the first in 1841, and the second in 1844 on this subject. These consisted entirely of practical facts, without any theoretical view either of the disease or remedy, and the experience of five years, and that of several foreign physicians have given corroboration to the facts which the author then advanced. In this, the third memoir, he is desirous to avoid everything beyond a simple statement of facts, and the inferences which directly may be deduced from them. The following general conclusions are deduced by M. Negrier:]

Fifty-six patients, affected with scrofulous disease, in different forms, were treated by means of preparations of the walnut-tree leaves.

In this number, thirty one were cures, and did not afterwards disappoint expectation. Eighteen patients, without being completely cured, underwent a degree of amendment very remarkable in their condition; and the greatest number among them were in the course of being cured. Four patients have obtained no advantage from the use of the medicine, from the state of their sores. Among them was one who was remarkably strengthened, and who, at the time specified, seemed in the course of being cured, under the use of cod liver oil.

Four children died during treatment; but two were destroyed by tubercular phthisis, one by acute *encephalitis*, and the fourth by double pneumonia.

The treatment, by the preparations of walnut-tree leaves, has furnished to him results, which he regards as sufficiently advantageous, in order to justify their serious examination, and warrant their being subjected to the control of systematic observation, particularly by hospital physicians, who have better means than others of administering the remedy accurately and in comparison with other agents.

Experience has satisfied him that the long-continued use of walnut-tree leaves has never caused, in the economy, any unpleasant effects. This medicine, which may

be placed in the class of slightly-aromatic bitters, possesses an efficacy nearly uniform in scrofulous disorders.

The first effect of the preparations of walnut-tree leaves is to augment the activity of digestion and circulation; to all the functions they impart a remarkable degree of energy. A natural question is, whether they exert any special action upon the lymphatic system? The facts recorded by the author lead him to think that they do. Under the influence of their use, the muscles become more firm, the skin acquires a ruddy tint, and speedily parts with its chlorotic paleness. It may be a subject of inquiry whether the walnut-tree leaf contains any other principle than tannin, which is, doubtless, not foreign to the tonic action of this vegetable.

As to comparison between this and other received methods of treatment, the condition in which most of the patients whose cases formed subjects of clinical observation were found, at the time of treatment, sufficiently prove, he maintains, that these different modes of management possessed no efficacy, when recourse was had to the preparation of walnut-tree leaves.

The preparations employed are the following:

The infusions of the walnut-tree leaves are made by placing a good amount (pinch) of these leaves, cut into two hundred and fifty grammes of boiling water. This infusion is sweetened with sugar, or with the syrup to be presently noticed. M. Negrier prescribed from two to three cupfuls of this infusion daily; and as many as five may be given.

The decoction of the leaves, which acts advantageously in the form of lotions, and as a topical application, in which the pledgets for dressing the sores are immersed, ought to be more strongly charged than the infusion. M. Negrier uses a small handful of leaves to a kilogramme of water, and boiling is continued from ten to fifteen minutes. This preparation is also very useful in the form of baths both local and general. Its efficacy is particularly remarkable when used by injection into fistulous passages.

The extract is prepared with the walnut-tree leaves, by the method of displacement. By employing the dry leaves, the practitioner has in his power the means of renewing this preparation, as often as he requires, during

all seasons; while, by using recent leaves, it is requisite to prepare it in too large quantity, and it is liable to undergo alteration. The syrup of the leaves of walnut-tree is prepared with the extract by mingling forty centigrammes with thirty grammes of simple syrup. By this means the practitioner knows what are the doses of the medicine which he employs. The syrup may also be prepared with the green leaves; and it is then more aromatic than that which is compounded with the extract; but it is impossible in this case to form a correct estimate of the quantity of the medicine which the patient daily takes. To young children he gives two or three teaspoonfuls of syrup in the course of twenty-four hours. The ordinary dose for adults is from thirty-two to forty grammes; and he has never gone beyond sixty-four grammes.

The pills of the extract of walnut-tree leaves are each twenty centigrammes of extract, rendered consistent by a sufficient amount of the powder of the leaves. Of these, two are taken daily; and he has never gone beyond four daily.

Lastly, in some cases, in which it may be useful to cause friction to be made upon the afflicted region, he employed an ointment composed of thirty grammes of extract of the leaves, forty grammes of lard, and fifteen centigrammes of essential oil of bergamot. The frictions require to be made gently, and for about fifteen minutes twice daily.

It is easy to understand, he observes in conclusion, that, considering the nature of the disease, the salutary effects of treatment are sometimes slow in appearing. He therefore recommends perseverance; and he expresses the opinion that, if in the hands of some practitioners the preparations of walnut-tree leaves have been administered without efficacy, the reason is, that either the patient or the physician became too soon tired with using them. It is, in short, requisite to persevere, when it is remembered, that, in order to obtain a durable cure, the physician has not only to oppose the effects of the malady, but also to effect a thorough change in the constitution of the individual.

[Having published his second memoir in 1844, M. Negrier completed the history of those patients given in the first paper, adding a list of persons treated by the reme-

dy subsequent to the publication of the first memoir, and he gives the following inferences on the result of the observations of six years experience upon the mode of treatment:]—

1. Scrofulous disorders are in general radically cured by the use of preparations of walnut-tree leaves.

2. The action of this therapeutic agent possesses a sufficient degree of steadiness to enable the practitioner to reckon upon the cure of three-fourths of the patients treated by means of it.

3. The action of this mode of treatment is generally slow. It requires from twenty to fifty days according to the nature of the symptoms, and the constitution of the subjects, in order that the effects may be rendered sensible.

4. Patients cured by means of the preparations of walnut-tree leaves almost all retain the health which they have obtained under the influence of this treatment. Few relapses take place.

5. The effects produced by the internal use of the extract of walnut-tree leaves are at first general: the influence of this method of treatment is subsequently evinced upon the local symptoms.

6. In certain forms of scrofulous disorders, it is only after a long time that the efficacious action of this treatment is observed. This remark is particularly applicable to strumous glands not in a state of ulceration.

7. The preparations of walnut-tree leaves exert, on the contrary, a sufficiently speedy action upon the sores and the fistulous openings, whether they are maintained or not by caries of the bones, excepting in persons of dry and nervous temperament.

8. Till the present time, the instances of strumous opthalmia which M. Negrier has observed, have been certainly and more rapidly cured by this method of treatment than by any other.—*Edin. Med. and Surg. Journal, Oct.* 1. 1850. *p.* 271.

Traumatic Tetanus cured by Frictions with Tincture of Belladonna.—M. Bresse, surgeon at the Military Hospital at Rennes, proposed, in 1848, the treatment of traumatic

tetanus by the application of tincture of belladonna, and reported a case, in which it had been successfully employed, in the "Gazette Medicale de Paris" of Sept. 30, 1848. M. Bresse has now placed on record another case which has come under his notice. The patient, one of the *Garde Mobile*, received a wound on the 20th of March; tetanic symptoms appeared on the 5th of April. Frictions of belladonna were commenced on the 6th, and by the 12th the patient was out of danger. Imprudently exposing himself to cold, the tetanic symptoms returned in the muscles of the back, but were quickly removed by again having recourse to the frictions. The tincture employed was composed of five parts of extract to eleven of alcohol, and was applied all over the body, and more particularly over the rigid parts.

M. Bresse adds, that another practitioner has arrested trismus, which he feared would proceed to general tetanus, by the same means.—*Gazette Medicale.*—*Med. Gaz.* from *Braithwaite's Retrospect.*

Hare-Lip in France.—It is, perhaps, not generally known in this country, that French surgeons are in the habit of operating upon children for this deformity a few days after birth. The justly celebrated Paul Dubois is a great advocate for this practice, which, it is contended, is extremely advantageous, as children at that early period, do not struggle: union is obtained very rapidly, and the little creatures cry but little, take the breast well, and do not seem to suffer much. M. Guersant, surgeon to the children's hospital, stated the other day, before the surgical society of Paris, that out of seven children operated upon almost immediately after birth, he failed only once; whilst out of the same number of children one month old, he failed five times. He attributes this disproportion to the fact, that newly-born children can do without the breast during four days; (?) they thereby are not apt to tear open the sutures by efforts at suction.—*Lancet*, from *Ib.*

On the comparative liability of Males and Females to Insanity, and their comparative curability when insane. By Edward Jarvis, M.D., of Dorchester, Massachusetts, pp. 32, 8vo.

This is an extremely interesting and valuable document. We regret that our limits will not permit us to quote largely from it; we must therefore content ourselves with a mere statement of the author's conclusions.

It would seem that males are more liable to insanity than females, although some countries are an exception to the rule; for instance Belgium and Norway. This is what we would naturally infer from the fact that men are more exposed to the exciting causes of the malady.—Amongst males by far the most frequent case of insanity seems to be intemperance, next to this is hereditary tendency: amongst women the most powerful cause is impaired health; and next to this ranks domestic trouble. Women also appear to be more frequently than men, affected with hereditary insanity.

From the reports of 189 Lunatic Hospitals, we find that amongst the males the recoveries amount to 40,6 *per cent.*, amongst the females to 43,9 *per cent.* Dr. Jarvis's explanation of this singular fact is doubtless as correct as it is philosophical. It amounts to about the following: That the causes which beget insanity in the male, are such as frequently produce structural lesions, whilst amongst females the preponderating causes are functional derangements. With this fact in view, we have no difficulty in reaching the third proposition in this pamphlet; that the rate of mortality of the insane, is much greater amongst males than females, the ratio of the latter to the former being as 15 to 21.

From pretty extensive researches, Dr. Jarvis concludes that the ratio of mortality from nervous diseases is much higher among males than females, including both sane and insane. Of 2,169,875 deaths, of which 1,163,198 were males, and 1,066,677 females, 16,15 *per cent.* of the males, and only 13,85 *per cent.* of the females died of nervous disorders. This little piece of statistics will doubtless astonish those doctors who are always assuring the ladies that their complaints are "all on the nerves;" or, supposing that women are really more liable than

men to nervous disorders, it may serve to explain the origin of the old saying, that "a sickly woman never dies."—*North Western Med. and Surg. Jour.*

Sick Headache cured by Full Inspirations.— When a medication is based upon the experiments made upon himself by an honorable professional brother, it is far better, in reporting it, to give his own words. We will then simply publish the communication of M. Tavignot upon the new therapeutic agent in the cure of this painful, if not dangerous disease.

"It was in the following manner that I discovered the efficacy of this new and apparently strange method for the cure of this affection. In October last I was attacked with pain and weight in the head, anorexia, a physical and moral prostration, etc. Experience taught me that I had to remain in this state for twenty-four hours. I concluded that this peculiar state of the nervous centers might depend upon a stagnation of blood in the venous sinuses of the dura-mater, as M. Auzias Turenne supposes, or upon an imperfect æration of this fluid. I immediately commenced respiring freely and fully during several minutes. I perceived a sensible relief, which induced me to continue, and in a short time I was cured. I got up and undertook my usual occupations, as I felt but a slight pain in my temples, which vanished in a quarter of an hour. This result was doubly agreeable to me, as it furnished me with a new and practical remedy. In ten persons, upon whom it has been tried, one-half have found an instantaneous relief, and in the others there has been an amelioration, or a complete failure. However, upon interrogating with care those who were not relieved, I am convinced that they did not have genuine sick headache: they had a neuralgic pain of the head, but it was not accompanied with that profound prostration and melancholy that I have mentioned as characteristic of the disease. It seems to me to be useless to search for the modus operandi of full and profound inspirations in the cure of sick headache. It is evident that by this means the venous circulation is accelerated, and the chemico-physio-

logical act of hematosis is hastened. Then the explanation of the success of this new method is in one or the other of these conditions, or perhaps in both.—*L'Observation*, from *Southern Med. and Surg. Jour.*

Errors in Diagnosis. By C. H. Cleaveland, M. D., of Waterbury, Vt.—Perhaps in no other way could the younger members of our profession be more benefited, than to have pointed out to them the errors that have occurred by a too hasty and incomplete investigation of cases before deciding upon the nature of the case, and the course of treatment necessary to pursue to ensure a cure.

Some years since a child who was playing with a *button* put it into his mouth, *and he said he had swallowed it;* but that night he was taken with a hoarseness somewhat resembling croup, and the parents becoming frightened, sent for their physician, who, after listening to the child's breathing, discovered that the button was lodged at the bifurcation of the trachea, or at the commencement of the bronchial tubes.

He called an elderly physician, his former preceptor, in consultation, who confirmed the diagnosis, and at once they resorted to tracheotomy, but did not that day succeed in dislodging the button, although they thought they could dintinctly feel it. The next day they reopened the orifice, but with no better success.

After a few days, the button was found in the boy's fæces, but he entirely lost his voice, and the last I heard of him he remained mute.

Several years since, a little school-girl fell from a tree, where she had climbed to procure some twigs, and her injury was so great that a physician was sent for, who discovered that she had broken her thigh, at the upper third; and after she was carried to her home, he reduced the fracture, and made the proper dressings, enjoining that the limb should not be moved, or the splints displaced until his next visit. The second day, when he called, the little patient was not in bed; and, on looking

out of the window, he discovered her feeding the chickens in the farm-yard.

The first year of my practice, a girl, aged about fourteen, was attacked with the epidemic erysipelas at the time of her first menstruation. The disease located itself upon the uterus, and soon her abdomen was as large as a mother's at six months' advance in pregnancy. One day, an old physician, hearing I had a difficult case, volunteered a call, and after a proper examination, at first pronounced her difficulty a suppression of urine; but in that he was overruled by the mother, who gave him ocular proof of his error. Next he said there was an abscess forming in the flesh of the lower part of the abdomen, and had a large poultice applied, *to draw it to a head.*

In a neighboring town, a man had been sick several days with a peculiar pain, and strange swelling of the abdomen; and the two medical attendants were doing all they could with fomentations, poultices, etc., to induce suppuration, when my friend Dr. B. was called in. The *catheter* gave him immediate relief.

I could fill pages with similar errors, but think these will answer as well as a larger number.—*N. H. Journal of Medicine.*

Acephalous Monster.—As there is no truly philosophical hypothesis as to the origin or cause of those spots or marks on the skin of children when born, or other preternatural perversions of conformation—whether it be the influence of the maternal imagination upon the fœtus in utero, or other causes, I thought the following case might interest you and your readers.

Was called to attend the first labor of Mrs. T., aged 20, of a highly nervous temperament, but had always enjoyed vigor and health till the fourth week of her pregnancy, when she became highly excited by very slight causes. At times, her friends informed me, she was so unreasonable in her requests as to give them fears she would become insane; but after the first two months she became healthy and tranquil, and looked forward to the period of her confinement with firmness.

I found her, four hours after the accession of labor pain, and one hour after the membranes were ruptured, with active pains, and on examination found the os dilated to twice the size of a crown-piece, with breech presentation. After waiting a while, a second examination revealed the true nature of the presentation. Both feet had passed under the pubis, with heels resting against the thighs, while the breech was well down in the pelvis. I made several strong efforts to cause the feet to go above the pubis, but failed in each attempt. As the pelvis was evidently above the ordinary size, and pains strong, I concluded to let the labor progress, which was brought to a close without any unusual trouble or suffering; but the child was a species of that class of monsters termed *acephalous*. The entire head was wanting down to the ethmoid and sphenoid bones anteriorly, and lower than the superior surface of the cerebellum posteriorly. There was a small mass of pulp which lay over the body of the sphenoid bone, from which the optic nerves appeared to take their rise. The whole surface was covered by a thin, transparent membrane, through which the parts beneath could be seen, giving it the appearance of flesh or muscle. The same appearance was upon the breech and knees. The glutei muscles on either side were wanting. The patella of each leg, and the integuments about them, were also wanting. Both knees and breech were covered by the same kind of membrane and had the same appearance as the head. One thing I should mention here; at both knee and hip joints the legs were permanently flexed, which accounted for the difficulty in the labor.

A sheet was folded about the child, so that it was impossible for the mother to have seen it; and while waiting for a pain to remove the placenta, I asked her if she had been frightened during her pregnancy, or seen anything to excite disgust. She said immediately, "I have." "Soon after I became pregnant," said she, "I went down into a basement room, and came upon a rabbit which the cat had brought in." "Well," said I, "how did it look?" Said she, "the cat had eaten off the top of its head, knees and tail, and I was so frightened I did not get over it for days;" said she had often told her husband she feared it would injure her child some way, as she could not keep it out of her mind. When shown the child,

which she was anxious to see, she exclaimed, "that head and those eyes look precisely like that rabbit's!"

I have always looked upon such monstrosities as *accidental* changes, which take place during the first stages of gestation; but this case put all my philosophy into the shade. What think you? Was this an accidental case, or did the influence of the mother's imagination cause that perversion? Yours,

G. W. GARLAND.

P. S. By-the-way, when a nævus growth does not exceed the size of a hazel-nut, it may be removed or destroyed by a daily application of tinct. iodine *strong*.—*N. H. Journal of Medicine.*

On the comparative value of the Diagnostic Signs of Pneumonia. By Professor Alison.—The following valuable observations occur in the course of a clinical lecture on some cases of pleurisy and pneumonia:

As to the special indications of peripneumony, whether with or without attending pleurisy, I think we shall find the most important and practically useful to be that given by the *sputa*—i. e., the appearance of tenacious and at first translucent sputa, thoroughly *stained* with blood, and thereby acquiring a considerable variety of colors in different cases, the reasons of which variety I do not pretend to know,—rusty, pink, purple, dark yellow, or greenish,—all to be regarded as inflammatory; but the darker colored, or more opaque, being generally the indication of the more advanced stage of inflammation. The *crepitous râle* is in some cases very distinct and satisfactory, but in many it is unperceived, or if perceived is faint and of short duration in the early stage of the disease, while it may be of long standing in the advanced stage, and during the convalescence; and in some it is not so easily distinguished from the somewhat coarser sound of the subcrepitous râle, which may depend on conditions in the lungs, or minute branches of the bronchial, very different from inflammation. On these accounts, this symptom has never seemed to me to realize the very natural hopes of Laennec, as to its practi-

cal usefulness in detecting pneumonia, when not otherwise indicated.

The other indications that we have of peripneumony by auscultation and percussion—dullness on percussion, bronchial sound, respiration, or its complete suppression, and imperfect expansion of the affected side—are rather, in fact, what may be expected, and can hardly be distinguished from the effects of attendant pleurisy, so frequently complicating that disease.

In regard to all those physical or local symptoms of peripneumony, this observation, I am sure, we shall find practically important, that although we may rely much on them, particularly when grouped together, and watched in their progress, as indicating the *nature* of the disease, we cannot rely on them at all as indicating its *intensity*, its *probable tendency*, or the *extent* to which antiphlogistic remedies during it are demanded, or can be safely employed.

Take, for example, the pneumonic sputa,—they may be seen in full perfection in cases which are partial and slight, or which are attended with extreme debility, demanding stimulants; and may be absent in cases which are extensive and urgent, and will bear full evacuation. I remember having two young men—both previously in good health, and seen early—under my care at the same time, in pneumonia; in one of whom we had the translucent sputa almost from the first, exactly resembling red-current jelly, but he was so feeble that he became faint the first time I set him up to examine his chest; and although I thought it right to take some blood from him, he did not lose ten ounces, generally or locally. In the other, we never saw any tinge of blood in the sputa, but the other symptoms were well marked and urgent, and he bore four full general bleedings perfectly well; the blood was sizy, and the symptoms were relieved, as usual, after each bleeding. Both these patients recovered perfectly well; and judging by the progress of the cases,—especially as regards the state of the vital functions, the pulse, and breathing,—we had no reason to regret either that the first was so little, or the second so fully bled; but if we had trusted to the sputa as indicating the nature and intensity of the disease, we should have thought that the first demanded the full antiphlo-

gistic treatment, and the last little or none. And I have seen several in which the peripneumonic sputa were peculiarly well marked, which I have thought it necessary to treat, from the time I first saw them, (late in the disease), by stimuli only, and which have recovered remarkably well.

Again, as to the crepitous râle, I have seen many cases which seemed to me well marked by all the other symptoms, and which have done well, generally, under the antiphlogistic treatment, in which I never could detect that symptom; and others, in which I was quite satisfied of its existence and extension through the lungs, while the other symptoms have either continued so mild or been of such a nature that no active antiphlogistic practice has appeared to be demanded or justified by that extension, and the whole symptoms have subsided without them. Particularly since I read the statements of M. Louis, as to the extension of the crepitous râle through the lungs, notwithstanding full bleeding, by which the pulse had been brought down,—from which he inferred that the idea of the power of bloodletting over inflammation had been a mistake,—I have attended to this point, and satisfied myself that he was quite correct as to the fact, but wrong as to the inference,—I mean as a general principle; because, in these circumstances, when the pulse and breathing have decidedly improved, although the râle may indicate that the inflammation continues and extends for a time, we may be very confident that it will subside without further treatment. The reason, probably, is, that the inflammatory exudation, although extending, is modified in character, and so attenuated as to be easily reabsorbed,—so that no complete obstruction, or permanent disorganization of the pulmonary substance, to any injurious extent, is effected. In these circumstances, all that is required is, to watch the patient carefully and revert immediately to the bleeding, or other antiphlogistic treatment, if the breathing becomes again more oppressed, and the pulse more frequent and *firmer;* under the conviction, given by experience, that the crepitous râle extending through the lungs in a case of recent illness, and in connection with a frequent and full pulse, and a labored state of the

breathing, implies much danger, which may be averted by such treatment; but that the same râle extending through the lungs, in connection with a more natural pulse, and an easy state of the breathing, or with dyspnœa, but a feeble or soft pulse, and damp, livid skin, either implies no danger, and demands no active treatment, or is to be counteracted by very different remedies. And I may add, that this is exactly the line of conduct which our predecessors would have advised in those circumstances, before the crepitous râle was heard of, although they could not have spoken with so much precision as we can, of the nature of the changes then going on in the lungs.—*Edinburgh Monthly Journal*, from *Ranking's Abstract.*

Medicated Soaps for the Treatment of Skin Disease.—Sir H. Marsh uses the following prepartions in chronic forms of skin diseases:—

1. *Sulphur Soap.*—Take of

White Windsor Soap, 2 ounces;
Spirit of Wine, colored with alkanet root, 1 drachm.

Pound the soap in a mortar till all lumps have disappeared, add the spirit and beat into a paste, then add

Sulphur sublimed, 2 drachms;
Otto of rose, 10 drops;
Beat altogether.

2. *White Precipitate Soap*, as the above, substituting white precipitate for the sulphur.

3. *Red Precipitate Soap*, the same, substituting red precipitated mercury, 1 drachm.

4. *Corrosive Sublimate Soap*, the same, adding corrosive sublimate, 1 scruple.—*Dublin Med. Press.—Ib.*

Differential Diagnosis of Gastralgia and other more Serious Affections of the Stomach. By M. Valleix.—The diagnosis of gastralgia is often difficult; the slighter

forms may be mistaken for the slight gastric disturbance, called by the French, "*embarras gastrique*," or for acute gastritis; while the ordinary chronic forms may be mistaken for chronic gastritis, simple ulcer of the stomach, cancer of the stomach, or intercostal neuralgia.

The most important distinctive signs are thus given by Valleix:

GASTRALGIA—ACUTE FORM.	GASTRIC DISTURBANCE.
Acute pain in the epigastrium.	*Discomfort* rather than pain.
Appetite *preserved.*	*Anorexia.*
No headache.	*Headache* frequent.
Nausea *only after meals, or in the morning.*	Nausea frequent at *all periods of the day.*
GASTRALGIA—ACUTE FORM.	**ACUTE GASTRITIS.**
Appetite *good.*	Appetite *lost.*
No pain on pressure.	*Acute pain* on pressure.
Vomiting *rare, mucus* or of *food.*	*Bilious* vomiting *frequent.*
No fever.	*Distant fever.*
CHRONIC GASTRALGIA.	**CHRONIC GASTRITIS.**
Usually uncomplicated.	*Usually complicated* with another affection.
Vomiting *rare, mucus or food.*	*Bilious* vomiting frequent.
Spontaneous pains often *very acute.*	Spontaneous pains *less acute.*
Usually no pain on pressure.	*Pain* on pressure *acute.*
Progress of disease *irregular.*	Progress less irregular.
Absence of fever.	*Fever generally present.*
CHRONIC GASTRALGIA.	**SIMPLE ULCER OF THE STOMACH.**
Appetite *more or less preserved.*	Appetite *lost.*
Vomiting a *considerable period* after food.	Vomiting *immediately* after food.
No vomiting of pure blood or dark matter.	*Sometimes* vomiting of blood or black matter.
Progress *slow.*	Progress *rapid.*

CHRONIC GASTRALGIA.	CANCER OF THE STOMACH.
Vomiting as before.	Vomiting *at long periods after food.*
Destroys *slowly.*	Destroys *rapidly.*
No signs of cancerous cachexy.	*Signs* of cancerous cachexy.
Progress *irregular.*	Progress *regular.*
CHRONIC GASTRALGIA.	INTERCOSTAL NEURALGIA.
Pain *not increased by pressure.*	Pains *on pressure.*
Well marked gastric disturbance.	No gastric disturbance.

British and Foreign Medico-Chir. Review.—Ib.

Diagnostic Value of Epigastric Pains.—According to Wunderlich, ('Handbuch der Pathologie und Therapie,') the following points are worthy of attention, in reference to pains in the epigastric region:

Gastric pains in persons whose digestion and appetite are unaffected, and which are not exacerbated by hunger or food, most probably depend upon the spinal cord, or on some organ adjacent to the stomach. Pains which are diminished by strong pressure may be set down to neuralgia. Pains which are distinctly increased when the hand is placed gently on the stomach, but which are not proportionally aggravated by firm or abrupt pressure, are either imaginary or sympathetic. Pains continue for days or weeks, or recurring at definite periods without any obvious cause; also pains which come on suddenly with great severity and disappear as rapidly, are, probably, due to gastric neuralgia; they may depend on gaseous distention. Pains arising in the scrobiculus cordis and radiating in various directions, may arise from cardialgia, rheumatism of the abdominal wall, or peritonitis. Gastric pains, which are suspended by food, depend on neuralgic affection, or the presence of parasites. Pains which exist, both while ordinary food is taken and when fasting, but which disappear when stimulating food or drink is taken, depend on anemia of the stomach. Pains which are increased by the smallest quan-

tity of food, indicate probable gastritis or degeneration. If pains supervene an hour or two after meal time, we fear disease of the pylorus. [This assertion will needlessly alarm a large proportion of dyspeptics.—ED.] Lancinatings are sometimes remarked in cancer.—*Ib.*

On Morbid Poisons. By John Simon, Esq., F. R. S., Surgeon to St. Thomas's Hospital, etc.—By *morbid poison* we understand a product, which is the supposed specific cause of certain specific diseases; of syphilis, for instance; of scarlatina, of typhus, of glanders, of small-pox, of hydrophobia, and the like;—a product, which has many striking differences from all other poisons, but chiefly these: first, that while other poisons (oxalic, or hydrocyanic acid, or sulphuretted hydrogen gas) act directly in proportion to their dose, becoming more or less deadly in proportion as more or less of them is brought to bear on the organism; you may observe, contrariwise, that the *morbid* poison (the poison of contagion) produces its characteristic results, when given in the minutest conceivable doses, just as surely, and just as deadly, as when the system is saturated with it:—and secondly, that while common poisons diminish from the body, or at the most remain stationary, during the production of their effects, morbid poisons apparently undergo, within the body on which they act, a striking and singular increase.

The phenomena which follow infection with a morbid poison consist of certain local changes, attended by a peculiar constitutional state. The *local* changes may be generalised as sub-acute inflammatory processes, attended (perhaps preceded) by the deposition of a *specific material*, which material in most cases contains an agent capable, by inoculation, of producing in another person the same symptoms as have attended its own generation in the original sufferer. The peculiar *constitutional* state is one essentially of depression; modified no doubt, and intermixed with those phenomena of reaction which the living body (like a spring) always opposes to the direct pressure of exterior influences.

Of the local charges, partaking of an inflammatory character, our memory can give many illustrations: such are seen in the pustules of small-pox; in the cynanche

and erythema, and kidney affection of scarlatina; in the intestinal ulcers of typhus; in the catarrh and eruption of measles; in the rupia or periostitis of syphilis; in the swollen parotid of mumps; in the dysentery of malarious fever; in suppurating tumors of glanders; and in various other symptoms that might be quoted.

And it is because of these local differences in *effect* that we are impelled to distinguish the *causes*, and to speak of them as *specific:* syphilis never produces ulcers in the ileum, scarlatina never causes iritis; the causative poison of the one disease differs from the causative poison of the other, for on the self-same subject it produces different effects.

[But there is probably a *material* in the system, or in the blood, upon which the morbid poison may act.]

What this material—the principle of infective disorders in the human subject—may originally have been, we are totally unable to say, but whatever may have been its first method of generation, we can now confidently speak of it as a possible product of the human body; we know that it is liable to develope itself out of some constituent of the human blood.

What are these constituents? Observation and argument sufficiently show, that the blood corpuscles and albumen can hardly be the constituents in question: first, because, after death by zymotic disease, they are found without evident alteration, and no considerable change in them could escape notice; secondly, because they are indispensable to life, and even their temporary transformation (if complete) would of necessity be fatal; thirdly, because immunity could never be attained by one attack of any particular disease, if it were requisite to exhaust these products: re-exposure to infection would ensure a return of the disease, and a reappearance of its phenomena.

For somewhat similar reasons, we may conclude, that the salts are not the elements concerned. Fibrine and the so-called extractive matters are what remain—can these be the ingredients in question? Substituting for the chemical phrase "extractive matters" the physiological one "waste of the tissues," I am strongly disposed to think an affirmative answer to that question; or, at all events, unhesitatingly to point here as the direction in

which accurate pathological investigation may be made with most prospect of success.

For, in the first place, they are matters already in progress of decay, and therefore eminently susceptible of new modification; in the second place, they are unessential to the nutritive processes, and that removal of them from the system, which would give immunity from re-infection, might be accomplished without withdrawing a vital ingredient from the blood; in the third place, only of such matters as these can it be said, that some of them occur but once in life. In infancy, in early age, and till puberty, there are certain waste materials which never afterwards occur; the temporary cartilages have to waste away, the thymus gland has to decay, peculiar changes referable to the sexual system have to be accomplished, and the effete products of these changes have to be eliminated from the system. And fourthly, notice that the surfaces and organs most prone to affection in the diseases in consideration are those which are eliminative and defecating; those whose normal products can hardly be retained for any time within the body, much less out of it, without undergoing a fœtid decomposition, which sufficiently stamps them with an excrementitious character. Bowels, skin, kidney, tonsils, are the favorite resorts of the several fever poisons, just as they are the surfaces by which naturally the organic waste of the several tissues is eliminated. And it may not be amiss to notice that, whereas the normal and healthy discharge of these substances commonly tends to occur in the highest attainable form of oxidation; and whereas, under a variety of atmospheric circumstances interfering with their efficient oxidation, they must tend to accumulate in forms more susceptible of fœted decomposition; so it is peculiarly under such circumstances—where ventilation is defective—where human beings are unduly crowded—where the air is loaded with de-oxidizing influences—that zymotic diseases tend to affect the system either through a new generation of their poison, or through some vast increase of susceptibility thus engendered.

On enquiry, it might appear that the relations of infective material to these natural products are definite and constant; that one—let us, for instance, say syphilis—would stand in the particular relation to fibrin; it would

be obvious that such an one would be of almost universal inoculativeness, and could only for a very short time, if at all, exhaust the patient's susceptibility to re-infection; and that a drug having certain relations to fibrin (mercury for example) would interfere with the affinities established by the disease. It might appear that another material, having its origin in the organic waste of nervous substance, would constitute the liability—say, to typhus; such an origin would almost fix the circumstances increasing our proneness to that disease, as well as prefigure the symptoms attending it. Of another material it might appear that it originates in the infantile decay of temporary cartilage, or of thymus, a decay occurring only once in life; that such material would constitute the susceptibility to measles or hooping-cough, a single attack of which commonly exhausts the patient's susceptibility for ever. Of a fourth material it might appear, that it arises in those changes of blood which attend the inflammatory and reparative processes, under direct atmospheric influence (as in open wounds, cutaneous or mucous,) and that in such a product would consist the humoral liability to erysipelatous infection, and to puerperal fever. I need not multiply these hypothetical cases, but, before leaving them, let me beg you to understand, that I employ them only as *illustrations;* that I do not adduce them as pictures of what occurs, only as diagrams explanatory of my meaning.

That the specific materials of the several morbid poisons, as they now pass daily under our notice, constituting the principles of zymotic infection, are either actually derived from the blood, or might have been thus derived, is quite a certainty. Whether each of them, in its first and original derivation, was a native ingredient of the blood, identical with that on which we now see its influence exerted; and whether its first conversion into a specific *materies morbi* occurred without exterior infection, are points which cannot be decided with confidence. In respect of many infected diseases, however, this view of their having first of all arisen spontaneously, would seem consistent with analogy. Experience confirms this theoretical view; for we not unfrequently hear of an outbreak of small-pox or scarlatina, where no communication can be traced with a person previously infected; and we con-

stantly have cases of typhus arising sporadically, where we may fairly consider the patient to have originated the disease within the limits of his own organization.

It is too much the custom to speak of the personal predisposition to infective disorders, as though it consisted in a condition of mere debility. There is no foundation for this view. If we examine cases of pure debility—such as occur under the influence of extreme inanition, or after severe injuries with loss of blood, or towards the close of chronic exhaustive disorders, we do not find in them any marked liability to the infection of morbid poisons generally. In hospital practice, for instance, we do not find that typhus or erysipelas propagates itself among the patients of a ward in proportion to their weakness. It cannot be too distinctly understood that the predispositions to these various disorders are themselves as various as the disorders, and consist in specific conditions of blood, hitherto very imperfectly explored. Mere debility, as such, has nothing directly to do with the matter: a person is liable to the infection of small-pox, because he has one matter in his blood; to that of measles, because he has another; to that of typhus, because he has a third; to that of scarlatina, because he has a fourth, and so on. A predisposition to one of these disorders is by no means necessarily, and possibly not at all, a predisposition to any other of the class. As regards the exterior circumstances which are considered predisponent to infection, I apprehend there can be little question that their mode of operation must for the most part be indirect: that overcrowding and defective ventilation will increase the liability to small-pox or scarlatina only so far as they hinder a natural elimination from the blood of those materials which constitute the liability to the disease, or as they maintain those materials in a state of imperfect oxidation favorable to the zymotic change. In examining the habitations of the poorest classes in our large cities, we find the atmosphere highly animalised—often fetid with organic matters: the air is so little changed, that it stinks with the volatile excretions of the many human beings crowded together; and to these contaminations are very generally added products of decomposition arising from their other secretions, which lie in cesspools, or have soaked into the soil beneath and around their dwellings. Such an atmos-

phere can do little towards purifying the blood of matters wherewith itself is already so loaded: the effete matters of the organism, which naturally seek their elimination in an oxidised state, and which for the healthiest elimination ought probably to be in a high degree of oxidation, are here debarred from completing their discharge in its most normal form: and the inhabitants of such localities are consequently maintained artificially, replete with those humoral products which constitute the predisposition to zymotic blood-diseases. It is in these localities, if at all, that such diseases originate *de novo*. I entertain no doubt that some of them do thus originate: though I am unable to state what it is which gives the requisite impetus, or why it is given with one disease oftener than with another. Typhus appears so frequently to arise in this manner, and the predisposition to it so intimately associated with local circumstances, that some writers have been disposed to overlook the unquestionable evidence that exists of the re-production and multiplication of the poison in the person of the sufferer, and have inclined to consider it an enchorial disease, incommunicable by personal intercourse.

With respect to other alleged predisponent causes, I incline still more strongly to the view already expressed in regard of atmospheric influences, that they can operate only indirectly, only by means of those specific blood-products which constitute the true predisposition in each case. If fatigue predisposes to a particular infection, it can hardly be for any other reason than that the fatigued organ furnishes the material permissive of infection. If errors or insufficiencies of diet, or certain courses of medicine should be found to form a predisposition to certain infectible disorders, their mode of operation could scarcely be otherwise, than by increasing the formation, or diminishing the discharge of that blood product, which is the immediate object of attack to the zymotic poison.

Therefore, as respects those instances of human morbid infection with which we are best acquainted, we may recapitulate our facts, and state our theory, in the following terms: that certain materials of the blood—materials not essential to the performance of its nutritive functions, are, by certain circumstances, rendered liable to undergo definite and specific changes; under the influence of which

they become determined, with increased rapidity, to the outlets of the body; and irritate these outlets in their passage; that these changes continue, until the materials affected by them are completely exhausted from the blood; and that the severity and duration of those changes is in proportion to the quantity of material seeking elimination: that the new matters engendered and evolved under these circumstances are capable in various ways, and with more or less certainty, of producing a precisely similar succession of changes in the blood of another individual, or of any number of individuals: operating always on some of the ingredients of the blood as that whence themselves arose, and determining it to the same outlets as that whither themselves were determined; so that the choice of material in the blood, and the choice of outlet in the body, constitute specific characters for the several morbid poisons distinctively, and so that the final products act always as special catalytics for that original material of the blood, wheresoever they may encounter it. But, finally, that under certain possible conditions of accumulation, or tension, in that original material, other circumstances may serve to start it in its progress of specific decomposition, without any demonstrable influence from that exterior catalytic, which is the ordinary occasion of its change.

From our foregone analysis of the pathology of morbid poisons, it is not difficult to deduce philosophical principles of treatment, or to devise a rational explanation of such success and such failure as medicine has hitherto encountered in this department of its ministrations. To check the further conversion of material into blood; to destroy the poison, or to turn it into harmless combinations; to aid or to anticipate the eliminative efforts of the disease; these would be the indications which pathology would suggest, and these have already, in great part, attained the sanction of experience. But both pathology and practice would concur in adding to these principles another, which, in our present age of palliative medicine, admits of almost infinite application; to remember (namely) that in each zymotic disease, nature is proceeding in her own way towards a curative termination, and that where (as too commonly happens) we are incompetent to conquer the disease by direct neutralizing antidotes, it

behoves us chiefly to devote ourselves to the humbler task of moderating local phenomena, and sustaining constitutional power. Thus it is, that in a vast number of perilous infections, we are able to assist nature through her difficult process of cure, by no other treatment than the judicious administration of natural dietetic tonics—food and wine. Thus it is, that while we recognise the absolute efficacy of mercury against the poison of primary syphilis, we constantly find ourselves without an antidote against its later combinations, and confidently rely on measures adopted, without reference to the specific nature of the disease, solely on the ground of their general invigorating power. Till you can neutralise the poison of typhus, of erysipelas, of scarlatina within the blood of your patients, as you would neutralise an acid or an alkali in a test-tube, never lose sight of this important principle; never forget that these morbid poisons are eminently depressive to life; that they tend to kill by shock and debilitation.

And finally, see what vaccination has done for one of them, perhaps, formerly the most malignant and unsparing. I have taken pains to explain to you the pathology of its preventive power, and very little reflection on the argument of this lecture will convince you that there is, in the nature of things, no reason why small-pox alone should be frustrated in its tendency—no reason why each zymotic disease should not have its own preventive catalytic—no reason why, in connexion with these other pestilences, other men's names should not hereafter be remembered as gratefully and as gloriously as Jenner's in relation to small-pox. Our resources for this great purpose of preventive medicine are not restricted to the teats of cattle. We have the pharmacopœia before us, many of its articles acting catalytically on the blood, and determining products of decomposition, in a characteristic way, to a specific plurality of organs. Not only is there no reason against the possibility that many of these medicinal catalyses may be preventive of the zymotic catalyses; but there is every reason for such a possibility. To give you an illustration, why should not belladonna (determining the products of its operation to the throat, the kidneys, and the skin) act as a medicinal catalytic of that material which constitutes the susceptibility to scarlatina, and thus,

in recognised reality (as heretofore in vague tradition) be preventive of that disease? Again, why should not the direct counteractive influence of drugs be extended in respect of these diseases, when they already are in attack? Why should we not be enabled by one drug to arrest the blood-change of typhus, and by another that of plague or glanders, just as with quinine we render the blood insusceptible of further detriment from the malarious poison.— *Lancet*, from *Braithwaite's Retrospect.*

Treatment of Habitual Constipation. By Dr. J. C. Warren.—The treatment of chronic costiveness, an ailment so common in persons who lead sedentary lives, may be either medicinal or alimentary. Of medicines, Dr. Warren employs but three, aloes, magnesia, and senna-wine. He considers that the bitter principle of *aloes* renders it in some measure a substitute for the deficient bile, and a few grains of the powder or gum forms a mild and effectual aperient. The watery extract (5 to 10 grains), combined with an aromatic oil, is one of the mildest of laxatives, taken fasting. Aperients should not be taken at night, when they become buried in the alimentary mass, and ineffectual, or in their action disturb the repose of patients of an irritable temperament; but when the stomach is empty, either before dinner or breakfast. *Magnesia*, however, is so mild an aperient, that even if taken at night, it does not disturb sleep, and, from its combining with the acids which have been generated during the day, is then even more likely to be useful. When the stomach is not acid, half an orange aids its action. *Senna-wine*, prepared according to Dr. Lane's process, is a very satisfactory aperient, the dose being from ½oz. to 2oz., and as it is slightly stimulant, it may be taken for an oppressed stomach at night. If taken in the morning it should be diluted with equal parts of water.

Among the *alimentary* substances which tend to relieve constipation in some persons, fruit is the most agreeable; but for this end it should be taken before meals, when the stomach is empty—its employment after a full meal

often giving rise to acetous fermentation and consequent disorders. Laxative vegetables are not usually easily digested by persons of weak stomachs, in whom they cause distressing flatulence. In other subjects they may act very beneficially. The costiveness which occurs after weaning is removed by a slightly sweetened infusion of cranberries. Some persons find advantage in drinking a glass of cold water, others a cup of strong coffee, early in the morning. Animal food is rather laxative than not, especially the fatty portions which, however, delicate stomachs cannot manage. Some people take much wine, believing it acts on the bowels. If it does so, it is from the mere weight of the fluid, or perhaps from its causing a toxical effect, when the bowels take on a conservative eliminatory action. Most wines and spirits, taken in moderate quantities, adstrict the bowels.

Fine flour is highly nutritious; and if exclusively used, like other nutritious substances, as jelly, arrow-root, milk, etc., causes costiveness. The artificial separation of the covering of the corn is counteractive of the intentions of nature, this stimulating the intestine to expulsive action. After employing, with great advantage, bread containing the *bran* in his own family, and recommending it to numbers of others, the author was induced to try a still coarser preparation. Wheat was ground in a coffee-mill, and then boiled with a succession of water and a little salt, for three or four hours. This Dr. Warren has found incalculably *the best and pleasantest remedy for constipation*, effecting quite a revolution in the economy and health, when taken in sufficient quantites (12oz.), either as a part or whole of the breakfast, or instead of pudding and vegetables at dinner. When the stomach will bear sweet substances, honey, molasses, etc., may be added with advantage. A moderate degree of fluidity, i. e., less than that of boiled rice or hominy, increases the laxative power. The wheat acts in part by its mere bulk, and probably in part by reason of the stimulating effect of the particles of bran.—*Am. Jour. Med. Sci.*

Uses of the Nitro-Muriatic Acid Bath. By Ranald Martin, Esq.—Mr. Martin, in some valuable papers on tropical diseases, gives the following directions for the preparation and use of the acid bath:

Take of hydrochloric acid, three parts; nitric acid, two parts; distilled water, five parts, mix carefully.

1. Of this dilute nitro-muriatic acid, three ounces by measure are to be added to each gallon of water, to form the bath.

2. Two gallons of water may suffice for an ordinary foot-bath.

3. The bath thus prepared will keep in use for a week, by adding to it, once every day, half an ounce of the dilute acid, and a pint of water, in order to make up for waste in evaporation.

4. A portion only of the bath is to be heated for use, after which it is to be added to the remainder, so as to make the whole of from 96° to 98°.

5. Let both feet be placed in the bath, while the inside of the legs and thighs, the right side over the liver, and the inside of both arms, are sponged alternately; or let the abdomen be swathed in flannel soaked in the bath. This should be continued for fifteen minutes, morning and evening.

6. While using the bath, a gentle aperient, as Cheltenham or Epsom salts, in some bitter infusion, should be taken every other morning; and, should there be dryness or harshness of the skin, a warm vapor-bath, used twice a week, will be found of much service in stimulating and opening the pores, and in purifying the surface of the body.

7. In urgent cases, a general bath to envelope the whole body should be used, the proportions of the dilute acid and water being continued as above stated.

8. Earthen or wooden vessels should be used for the baths, and the sponges and towels kept in cold water, lest the acid corrode them.

9. The acid mixture forming the bath should be heated in earthenware vessels—large pipkins for instance. When used, the temperature should be measured by the thermometer, at 96° and 98°, as the body will be chill-

ed by a degree of warmth that feels comfortable to the hand.

10. When a general bath is used for the whole body, the patient, before going into the bath, should be covered over with blankets, until a gentle perspiration is induced.

11. When in the bath, a covering blanket should be drawn over the shoulders, and up to the chin, to confine the steam, and a night-cap should be worn to protect the head from the steam.

12. Before quitting the bath, the bed, drawers, and towels should be warmed and ready; the body to be dried while standing in the bath, and the dressing to be performed immediately.

13. When the acid-bath excites much irritation of the skin, the quantity of dilute nitro-muriatic acid may be diminished; and when irritation of the gums, with general malaise, occurs, the use of the bath should be relinquished for a time, resuming its application, if necessary, when the above symptoms have subsided.

Mr. Martin states that a course of two months of this bath is found generally to restore the healthy action of the liver; nor does it interfere with the use of bitter tonics, or even with mild chalybeates, but, on the contrary, it rather gives effect to their operations. In the severer instances he has continually to use this means for a much longer period. In treating torpor of the liver, he recommends warm and tepid baths, and especially those of sea-water, in aid of other medical treatment, reducing the temperature as the patient approaches health, and after the cessation of other means of cure.

The neglect of the nitro-muriatic acid treatment in cases of the nature here treated of, and in which mercury in every form, proves not only insufficient but pernicious, is much to be regretted.

A valuable quality of the nitro-muriatic acid is, that whether exhibited internally or externally, its influence in promoting the secretions is not in the least degree counteracted by opium, even when exhibited in the largest doses. We obtain, in short, from the use of the mineral acids in the treatment of chronic disease, all the remedial aids which can be obtained from mercury in the treatment of acute disease; and that, without any of

the injurious consequences that so frequently ensue from the exhibition of the last named agent. Persons of anemic or of scrofulous habit are liable to serious injury from the use of mercury, whether given in large doses, during a few days, or in alterative doses during weeks or months. It is quite otherwise in respect to the acids, the most marked and lasting improvement of the general health being the ordinary result of their exhibition.—*Lancet and Prov. Med. and Surg. Jour.—Ib.*

On the Symptomatological Value of Palpitation. By Dr. O. B. Bellingham.—Dr. Bellingham thus contrasts palpitation arising from organic disease of the heart, and that independent of it.

Palpitation depending upon Organic Disease of the Heart.	*Palpitation independent of Organic Disease of the Heart.*
1. More common in the male than the female.	1. More common in the female than the male.
2. Palpitation usually comes on slowly and gradually.	2. Palpitation usually sets in suddenly.
3. Palpitation constant, though more marked at one period than at another.	3. Palpitation not constant, having perfect intermissions.
4. Impulse usually stronger than natural; sometimes remarkably increased, heaving, and prolonged; at others irregular and unequal.	4. Impulse neither heaving nor prolonged; often abrupt, knocking, and circumscribed, and accompanied by a fluttering sensation in the præcordial region or epigastrium.
5. Percussion elicits a dull sound over an increased surface, and the degree of dullness is greater than natural.	5. The extent of surface in the region of the heart, which yields naturally a dull sound on percussion, is not increased.

6. Palpitation often accompanied by the auscultatory signs of the diseased valves.	6. Auscultatory signs of diseased valves are absent; bruit de soufflet often present in the large arteries, and a continuous murmur in the veins.
7. Action of the heart, regular, irregular, or intermittent; not necessarily quickened.	7. Rhythm of heart usually regular; sometimes intermittent; its action generally more rapid than natural.
8. Palpitation often not much complained of by the patient; occasionally attended by severe pain, extending to the left shoulder and arm.	8. Palpitation often much complained of by the patient; more readily induced by mental emotion, and frequently accompanied by pain in the left side.
9. Lips and cheeks often livid; countenance congested; anasarca of lower extremeties common.	9. Lips and cheeks never livid; countenance often chlorotic; anasarca absent, except in extreme cases.
10. Palpitation increased by exercise, by stimulants and tonics, etc.; relieved by rest, and frequently also by local or general bleeding, and an antiphlogistic regimen.	10. Palpitation increased by sedentary occupations; by local and general bleeding, etc.; relieved by moderate exercise, and by stimulants or tonics, particularly the preparations of iron.

[The influence of the coronary circulation in producing palpitation is much insisted on by the author. He says:]

In considering the immediate cause of palpitation, writers do not appear to me to have taken sufficiently into account the coronary circulation, although there can be no doubt that it performs an important part, and that derangement of its circulation will be followed by derangement of the functions of the heart equally as when the circulation through the chambers of the organ is impeded or deranged.

The integrity of a muscle in its healthy action, depends mainly, we know, upon its receiving a due supply of arterial blood; if this is sufficient, and of a good quality,

the functions of the muscle will be performed with vigor; while, if the supply is too small, or if its quality is deteriorated, the functions of the muscle will be impaired. Now, the heart being a muscular viscus, requires, for the vigorous performance of its functions, an efficient supply of arterial blood: hence, although the blood which circulates through the chambers of the heart is the ordinary stimulus to the contractions of the organ, if the coronary arteries which convey the materials for its nutrition carry it in sufficient quantity, or of a deteriorated quality; or if, on the other hand, it is conveyed in increased quantity, or is of too stimulating a quality, the functions of the organ will suffer.

Thus, in anæmia, the quality of the blood being deteriorated, and a given amount containing less of the materials of nutrition, it is necessary that a greater quantity should pass through the coronary vessels in a given period, and the action of the organ is accelerated in order to compensate for the deficiency. Again, in states of plethora, where blood is rapidly formed, the heart is excited to increased action, very probably in consequence of the stimulant nature of the blood which circulates in its vessels, and its increased amount.

Lastly, in cases of valvular or other disease of the heart, where considerable obstruction exists in the pulmonary circulation, and the venous blood does not undergo the necessary changes in the lungs, the coronary arteries will convey a mixture of venous and arterial blood to the tissue of the heart; the functions of the muscle become impaired, its irritability diminishes, and it is no longer obedient to the stimulus of the blood which distends its cavities: hence its action becomes irregular and unequal; indeed, in the advanced stage of valvular or other disease of the heart where the pulmonary circulation is greatly impeded, the cessation of the heart's action, and the death of the individual, is probably owing immediately, in many cases, to the coronary arteries conveying venous blood to the tissue of the heart.

Before dismissing the subject of palpitation, I may observe, that this symptom frequently is present in a marked degree in the class of patients who present themselves at hospital, without their appearing to be conscious of it. When questioned, they allow that they feel some oppres-

sion in the præcordial region, but hardly admit that it amounts to palpitation, though, when we come to examine the chest, the action of the heart is often much increased, and its impulse sometimes so strong as to raise the head of the observer. This, no doubt, arises in some measure from the sensibility being blunted by the ill oxygenation of the blood, and in some measure, also, from the parts having had time to accommodate themselves to their altered condition. On the other hand. it is no less remarkable how often, when palpitation depends simply upon functional derangement, the patient's attention is directed mainly to it; he is most unhappy in consequence, and can scarcely be made to believe that he is not the subject of organic, and, therefore, in his opinion, of incurable disease of the heart.—*Medical Gazette.*

Dislocation of Femur reduced on sixty-eighth day, by Jarvis's Surgical Adjuster. By Dr. Josiah Crosby, of Manchester, U. S.—On the 16th of January, 1849, Mr. P—, æt. 56, muscular, weighing about 180 pounds, of intemperate habits, was thrown from a sleigh, and dislocated his left hip. Six weeks passed before the nature of the injury was understood, and more than three weeks afterwards before any attempt was made to reduce it.

On the sixty-eighth day of the dislocation the author saw the patient for the first time—found him lying in bed with all the diagnostic signs of dislocation of the head of the femur upwards and backwards; limb below the natural temperature, purple, œdematous, and shortened from three to four inches. Although the case seemed almost hopeless, it was agreed that an effort at reduction should be made, and *Jarvis's Adjuster* was accordingly applied. Before extension was commenced, an attempt was made to bring the patient under the influence of chloroform, but it was soon abandoned on account of violent spasms which were produced by it, and the operation was done without the aid of this powerful agent. The extension was continued, gradually increasing the power for nearly twenty-four hours, when by a little rotation of the limb, the head of the bone was brought into the socket with a snap audible to the bystanders.

The hand of an assistant was placed on the trochanter while flexion and slight rotation were given to the limb, to see if the leg would remain at full length and in the right position. Everything proving satisfactory, the patient was laid in bed, and a bandage applied about the hips to guard against accidents from motion.

Dr. C. remarked that in the Report on Surgery to the National Medical Association for 1849, the chairman of that committee gives an unfavorable opinion for himself and Prof. Pope of the St. Louis University, in regard to the "Adjuster," but that no statistics were given on which this opinion is founded. He was of opinion that an instrument of so much power and of so varied application deserves a fair trial, and that by this test its character should be fixed.—*Ranking's Abstract.*

The Kousso—a New Anthelmintic. By Jonathan Pereira, M. D., F. R. S.—The Kousso, or Brayera Anthelmintica, is an Abyssinian tree twenty feet high. Branches round, rusty, tomentose-villose, marked by the annular cicatrices of the fallen leaves. Leaves crowded, alternate, interruptedly imparipinnate and sheathing at the base. Leaflets oblong, or elliptical lanceolate, acute, serrate, villose at the margin and on the nerves of the under surface. Stipules adnate to the petoile, which is dilated at the base and amplexicaul. Flowers diœcious, small, greenish, and becoming purple; repeatedly dichotomous; the pedicels with an ovate bract at the base.

The so-called male flowers may be regarded as hermaphrodite flowers, inasmuch as the carpels are well developed. The female flowers are somewhat different in their structure. The outer segments of the calyx are much more developed than in the female flowers, and are four or five times larger than those of the inner row, and are placed somewhat below them; the petals are entirely wanting; the stamina are rudimentary and sterile. The ripe fruits are unknown.

The tree grows in Tigre, Agame, and Shoa; it is cultivated everywhere, and Dr. Beke writes that the tree is "found throughout the entire table-land of North-Eastern

Abyssinia, but appears to require an elevation of upwards of six thousand (perhaps of seven thousand) feet for its growth. Where I found it most luxuriant was in the vicinity of the source of the river Abai (Bruce's Nile,) at an elevation of close upon nine thousand feet. Tigre, the northern portion of Abyssinia, being, on the whole, of lower elevation than the rest of that country, the tree is only found there in a few places."

Bruce describes the flowers as being of a greenish color, tinged with purple, and when fully blown, of a deep red or purple. The petals, he says, are white.

Preparation.—Mr. Johnston states that the kousso is gathered for medicinal purposes before the seeds are quite ripe, whilst still a number of florets remain unchanged. The bunches are suspended in the sun to dry, and if not required for immediate use are deposited in a jar.

Pharmacography.—The author has seen only one package of kousso; this was kindly opened in his presence by M. Simond, of the firm of Caylits, Simond & Co., the agents of M. Rochet d'Hericourt. It was a deal box containing about 30 lbs. of the dried flowers, wrapped up in a large skin of red leather. On removing the lid of the box and untying the leather package, the fragrant or balsamic odor of the dried flowers was very powerful. It appeared to him to be somewhat similar to the combined odors of tea, hops, and senna leaves. The flowers had apparently undergone no preparation beyond that of desiccation. The bunches of flowers were perfect and unbroken, though of course compressed. The general color of the dried mass was greenish-yellow; but when the flowers were more closely examined, the edges of the petals were seen to have a reddish or purplish color. The taste of the dried flowers is at first not very marked, but after a few minutes a feeble, senna-like, acrid, unpleasant taste becomes perceptible. By soaking the dried flowers in water, they may be unfolded sufficiently to determine their botanical characters which have been already described. When submitted to microscopic examination, the hairs are perceived to be simple lymphatic hairs, tapering at the distal extremity. In Abyssinia, two sorts of kousso are distinguished, viz., first, the *red* kousso produced by the female flowers; secondly, the male flowers

known as *kousso esels*. In commerce the two sorts are always mixed together.

Adulteration.—Considering the enormous price (about 1*l.* 15*s.* per ounce) at which kousso has hitherto been sold in Paris, and the very limited quantity originally supplied by M. Rochet d'Hericourt, it cannot be surprising that the article should be extensively adulterated. Indeed, the author has been assured, on credible authority, that the powder now selling as kousso is, in fact, the powder of pomegranate bark, and that legal proceedings have been commenced in Paris to put a stop to the fraud, which is well calculated to injure the reputation of the genuine Abyssinian remedy. He has no doubt but that the microscope would readily detect the substitution; but the surest way of obtaining the genuine article is, to purchase the dried flowers in the entire state, not in the form of powder.

Although it is not improbable that the anthelmintic property of kousso may in part depend on tannin (since the pomegranate bark, which contains this principle in abundance, is, like kousso, also an anthelmintic,) yet what may be termed the peculiar property of the kousso probably resides chiefly in the bitter acrid resin. This is soluble in alcohol and in ether, and appears to be a neutral body, manifesting neither distinct alkaline nor acid properties.

By boiling the dried plant in water a fragrant odor is evolved. No doubt this, as well as the odor of the dried plant itself, depends on the presence of a *volatile oil*, of which, however, no mention is made in Wittstein's analysis, the oil being present in too small a quantity to admit of its collection when small quantities of the flowers are operated on. It is not improbable that the anthelmintic properties may, in part, depend on this oil; for Schimper states, that in Abyssinia the plant is considered to have lost its anthelmintic powers in the third year after its collection. In Europe, however, it retains its powers for a longer period (on account of the cooler climate?) for the flowers which have been used for all the recent experiments have been collected more than four years, and we are told in the shop-bill of a Parisian pharmacien, that they may be kept for an indefinite period.

An infusion or a decoction of kousso strikes a dark green olive tint with a solution of the sesqui-chloride of iron.

Medicinal Properties.—Neither botanical characters, sensible qualities, nor chemical composition, would have induced us to suspect that kousso possesses the valuable anthelmintic properties which experience has shown that it does. The general and prevailing quality of the rosaceæ is astringency, dependent on the presence of tannic and gallic acids. This is observed in the flowers (*e. g.* rose-petals) as well as in other parts of the plants. In this quality kousso agrees with its congeners. But it can scarcely be on this that its vermifuge property solely depends; otherwise the rose-petals, or other equally powerful astringent, would be as effective in expelling worms as the Abyssinian flowers. But in rosaceæ, as in many other families of the vegetable kingdom, anomalies exist, and to this head we must, for the present, be content to refer kousso.

Our confidence in the anthelmintic properties of kousso rests, then, on experience only: and the evidence on this point is very strong. All modern travellers in Abyssinia are agreed on the great success of the remedy on the natives of that country; and the experience of physicians in France, England, Germany, and Switzerland, confirms the favorable reports made by those who have seen the kousso used in its native country.

In Paris it has been employed with great success by Chomel and Sandras, as well as by numerous other distinguished physicians. In London, our experience of it is much more limited; but the successful results of its use in King's College Hospital, in the hands of Drs. Budd and Todd, and of Dr. Gull, in Guy's Hospital, confirm the favorable reports of its efficacy which had reached this country from abroad.

The physiological effects of kousso are not in general very great. Sometimes it excites a slight sensation of heat, nausea, or even vomiting, creates thirst, and frequently, perhaps usually, a gentle action on the bowels. But the latter is commonly so slight, that in a considerable number of cases it is necessary to follow its administration by a mild purgative. It is obvious, therefore, that the efficacy of kousso as an anthelmintic does not depend

on its purgative or evacuant influence, but on its poisonous or toxic action on the worm; in fact, it is a true *vermicide*. In one case, that of a woman in France, it brought away ten worms, of which one only manifested evidences of vitality, and that for a few minutes only.

Kousso appears to be an effective anthelmintic in both kinds of tape-worm; viz., the *tænia solium* and *bothriocephalus latus*. In most of the reported successful cases, the *tænia solium* was the parasite expelled; but in one of Chomel's cases, the worm which was evacuated was the *bothriocephalus latus*, and the author is informed, that kousso has proved most effectual in Switzerland, where, as is well known, the *bothriocephalus* is the prevailing tape-worm.

The dealers in kousso assert that one dose will, in every case, effect the radical cure of the tape-worm. But this must be obviously an error. Even supposing that it invariably destroys all the worms in the alimentary canal at the time of its exhibition, it can in no way prevent their recurrence, provided the patient retains his predisposition, which there is no reason to suppose is affected by the kousso, and is subjected to the same influence. It certainly does not radically cure the Abyssinians: since, as several writers tell us, they resort to this remedy monthly. Schimper, the governor of Adoa, says it does not completely expel the tænia, or at least rarely does so. But he adds, that possibly in Europeans, in whom the verminous disposition is not so pronounced as in the Abyssynians, it may perhaps act in a more complete manner. In the Abyssinians this verminous disposition is innate, and is dependent, he adds, on the regimen which they adopt.

Hitherto the great drawback to the use of kousso has been the difficulty of procuring the remedy, and its enormous cost. At the time when it could be purchased in Paris, its price was 1*l.* 15*s.* per ounce, or 17*s.* 6*d.* per dose. M. Rochet d'Hericourt, the sole holder of the medicine at the present time, refuses to sell any quantity less than his entire stock, at the rate of one guinea per ounce. His nephew tells me that his uncle possesses 1400 lbs of it, which, at one guinea per ounce, will cost 22,400 guineas. The impossibility of effecting a sale on such terms will, the author doubts not, ultimately compel the holder to re-

duce his demands to something approaching to reason. It does not appear that the remedy is very costly in Abyssinia. Schimper, in writing from Adoa, in Abyssinia, says that it is found in commerce at a very low price. At Yangaro (commonly called Zingaro) the sovereign has the exclusive use of it, his subjects being prohibited from employing it; but in other parts free trade in kousso is permitted. Considering the frequency and rapidity of our communications with Egypt, to which place, according to Dr. Brayer, kousso is conveyed by caravans, no difficulty, the author apprehends, will be experienced in obtaining an abundant supply of it. Its present price is a virtual prohibition of its use.

The flavor, though not very strong, is by no means agreeable; and is sufficiently powerful in some patients to create disgust and excite vomiting. In one case, under M. Chomel, the whole of the remedy was rejected by vomiting. No ill effects have resulted from its use in this country, nor has the author met with any statement of its injurious action, except in Mr. Johnson's "Travels in Southern Abyssinia," where it is stated that its "operation is speedy and effectual; and to judge by the prostration of strength it occasioned in my servants when they employed this medicine, it must be dreadfully severe. I can answer for this, that it occasions frequent miscarriages, often fatal to the mother, and even men have been known, after a large dose, to have died the same day from its consequences. I am, therefore, surprised at the noise which this remedy has occasioned the last few years in Europe, as if it promised to be a valuable addition to our materia medica. This, I conceive, can never be; for no civilized stomach could bear the bulk of the drug necessary to produce its effects. Even in Abyssinia it is but barely tolerated; and let another remedy equally efficacious for dislodging tape-worm be introduced into that country, and the use of kousso will be soon abandoned. In fact, several other vegetable productions are now employed to escape the punishment of a dose of this violent cathartic."

Administration.—Both Bruce and Schimper tell us that the Abyssinians take a handful of the dried flowers as a dose. In Paris the dose has varied from four to six drachms. In general, however, half an ounce (troy

weight) is considered a dose for an adult. For different ages the doses are thus adjusted:

Adults	1 dose	=240 grs. (½ oz.)
Children from 7 to 12 years	⅔ of a dose	=160 "
" " 3 to 7 "	½ "	=120 "
" not exceeding 3 "	⅓ "	= 80 "

The kousso should be taken in the morning fasting. The only preparation necessary is, that the last meal of the preceding evening should be slight. The evacuation of the bowels by a mild purgative or a lavement is also desirable. The mode of administering the remedy is as follows:—the powdered flowers are to be mixed with lukewarm water, for an adult about ten ounces, and allowed to infuse for a quarter of an hour. A little lemon juice is then to be swallowed, and the infusion being stirred up, the whole is taken, liquid and powder, at two or three draughts, at short intervals, being washed down by cold water and lemon-juice. To promote the operation, tea, without sugar or milk, may be taken. In three or four hours, if the remedy has not operated, a dose of castor oil, or a saline purgative, should be administered.—*Dublin Med. Press and Pharmaceutical Journal*, from *Ranking's Abstract.*

Clinical Lecture on the Kousso.—[Dr. Budd having obtained a supply of this medicine, tested its properties in several cases, upon which he subsequently made the following comments:]

The medicine has been given in the morning, before breakfast, which is the best time for administering all remedies for tape-worm, as the small intestine which the worm inhabits is then more empty than at other times; the worm, consequently, less likely to be sheathed, and protected from the action of the drug, by the other contents of the bowel.

The powder has been infused for ten minutes in three-fourths of a pint of hot water. The infusion has then been stirred, and the whole drunk.

One of the patients, under the care of Dr. Todd, a wo-

man advanced in pregnancy, vomited about half of the dose; but what remained in the stomach destroyed the worm. Two of the other patients had a slight feeling of nausea for ten minutes or a quarter of an hour, after taking the medicine. Another was several times purged by it; another, the woman to whom we first gave it, had headache after taking it, and ascribed to it a diuretic effect. The rest felt no uneasy sensation whatever from the medicine.

In the cases that fell under my own care, I ordered the patients to live sparingly, and to take a seidlitz powder, or a dose of castor oil, the day before taking the kousso, for the sake of emptying the bowels, and so leaving the worm more exposed. This is a precaution which it is well to take before administering any of the remedies for tape-worm. They all act directly on the worm, and to take effect must, of course, be brought in contact with it.

I also ordered the patients to take a seidlitz powder, or a dose of castor-oil, after the kousso, to carry the medicine down to the worm, and to expel the dead or enfeebled worm from the bowels. This expedient, also, is equally applicable to other remedies for the tape-worm, and especially to turpentine, which, if it remains long in the stomach, or passes slowly through the bowels, gets absorbed and irritates the kidneys and bladder, producing strangury and bloody urine, and may not reach the worm in quantity sufficient to kill it.

Tape-worms are very tenacious of life. They are seldom voided entire without the aid of medicines that act especially upon them. Single joints often come away, and pieces two or three feet long are now and then voided, but it very seldom happens, unless after medicine, that a portion comprising the head is thus passed. This portion remains and grows again, so that a person is often plagued with the parasite for years. One of our patients, Sarah W——, had been so plagued for sixteen years, during which she told us that she had seldom gone a week without passing joints of the worm. She had taken turpentine, and the bark of the pomegranate root, and some years ago, when she was at Fort Beaufort, at the Cape of Good Hope, she took the root of a plant used by the natives as a remedy for tape-worm, which she says is called there "Cacay." She describes this root as being round, and, when scraped, white, like a turnip, and sweet to the

taste. This medicine had very little effect. The turpentine and the pomegranate brought away long pieces of the worm, but the head and the portion near it remained, and the worm grew again. The worm was expelled after the kousso in different portions, on the 11th and 12th of April, and she has since had none of the symptoms which she attributed to it. She is still (May 31st) in the hospital, for prolapsus of the uterus, which she had long had, but she feels convinced that the worm is entirely destroyed.

Another case, that shows more strikingly still the tenacity of life of the tape-worm, is that of Samuel P——. He first passed joints of the worm seven years ago. In September last, he was brought into the hospital with cholera, and on the day of his admission passed a portion of the worm two yards in length. He remained in the hospital three weeks, on account of the cholera. Some time after this, he again passed joints of the worm, and to get rid of it came to the hospital as an out-patient. Turpentine and castor-oil were given him, and brought away a long piece of the worm. The ailments, which he attributed to the worm, were much relieved for a time. They then became more severe; joints of the worm were again passed, and in January last he came for the second time to the hospital to be ridded of the worm. Turpentine and castor-oil were given him, as before; a long piece of the worm was again expelled, but the creature was not destroyed; so that here the worm had existed seven years, had kept its place during the terrible commotion and flooding of the intestines in cholera, and had escaped destruction by two doses of turpentine. P—— took the kousso on the 3d of May, and the next morning voided the worm, which was ten yards long.

In all cases in which the kousso has been given in the hospital, the head of the worm, or the taper portion near the head, has been found, so that there is reason to suppose that the creature has been entirely destroyed. The action of the medicine is very speedy. In one of the cases, in which the bowels were slow to move, the worm was expelled, in different portions, in the two days succeeding that in which the kousso was taken; in all the other cases it was expelled the same day, and in several of them after the lapse of only three or four hours.

The result of our experience, then, is, that the kousso

is a very effectual remedy for tape-worm; and that in its action it is both speedy and safe.

I have had little experience of the male fern. But the kousso is certainly much more efficacious than the pomegranate; and much more efficacious, as well as less disagreeable, and safer than turpentine. There is a considerable demand for it at the hospital, which, on account of the cost, we cannot satisfy. I trust, however, now that its efficacacy is known in this country, which has commercial relations with every part of the world, that a fresh supply will soon be brought here, and that we shall have it at a reasonable rate.

From one of our patients two worms, one very large, and the other much smaller, were expelled by the kousso. It sometimes happens that as many as three or four of these worms are found together; but such an event is very uncommon. The tape-worm requires no mate, and generally leads a solitary life; and, hence, has been called by the French, *ver solitaire*—the solitary worm.

In the cases which fell under my own care at the hospital, notes were taken of the ailments which the patients attributed to the worm. Most of these persons had some unpleasant sensations referred to the stomach and bowels, such as a feeling of sickness or nausea, especially on first getting up in the morning; pain, or a sense of sinking at the epigastrium; flatulence; a feeling at times as if a worm were moving in the bowel. It is worthy of remark, that in none of them was there diarrhœa. The appetite is very variable—in some, much impaired, in others, craving.

Two or three of the patients had a troublesome cough; and one, annoying palpitation; which were ascribed to the worm. Some of them complained, also, of unpleasant sensations in the head; giddiness or drowsiness felt during the day, and especially after meals; and almost all complained, more or less, of weakness, and lassitude, and incapacity of work.

The most constant of the symptons were a feeling of lassitude, a sense of nausea on first getting up in the morning, and drowsiness felt during the day. But symptoms such as these are of very little use in diagnosis. Persons who have tape-worm generally discover the fact by the passing of joints. The worm seems to grow rapid-

ly; and the tail-joints, as they attain their full development, drop off, and are voided with the other contents of the bowel. Probably no person suffers very long from tape-worm, without voiding some of these joints. The existence of the worm cannot be safely inferred, and the remedies for it cannot be given with a fair chance of success, unless joints have been passed. It is a common belief that while the joints are dropping, the worm is feeble, and that the medicines which kill it act more surely soon after joints have been passed.

[Numerous cases have been recorded by Mr. Armstrong, ('Lancet') and others, which fully confirm the superiority of this medicine over those usually given in tape-worm.] —*Ib.*

Savine in the Treatment of Habitual Abortion. By Dr. Metsch.—When the disposition to abortion is dependent upon a diminished vitality of the uterine system, or functional weakness of its nutritive vessels, Dr. Metsch says that medicines of a stimulant and strengthening description, acting powerfully upon the circulation of the organ, are indicated, and of all such substances *savine* is most to be relied on for this end. Of course so powerful a drug requires skilful selection of appropriate cases for its employment, or it may give rise to hyperæmia of the pelvic abdominal organs, inducing hæmorrhage, inflammation, abortion, or death itself. Local or general plethora, or serious diseases of any part, contraindicate its use. An infusion is made by adding from two to four drachms to six ounces of boiling water, a spoonful being given morning and afternoon during the intervals between the menstrual periods. On some occasions, before commencing with it, catarrhal or gastric disturbances have to be allayed, as also irritation dependent upon congestion, rheumatism, or disorder of the nervous system. Small general or local bleedings, emetics, aperients, tepid baths, or friction of the surface, are required in different cases. So, too, regulation of diet, abstinence from sexual excitement, rest in the horizontal position as long as pain is present, are then indicated.

If the disposition to abortion depends upon an augmented irritability, and contractibilty—a condition not always opposed to the first named—the savine does not alone suffice, but a medicine is required that exerts a special effect in regulating uterine irritability, the ergot of rye, which should be added to the infusion in the proportion of one to two, when former miscarriages have been induced by the primary contraction of the womb without preliminary hæmorrhage. Another modification in the prophylaxis is to be made when former abortions have been attended with great urinary irritation, in which case six drops of Tr. Lyttæ should be added to each dose. When, prior to former abortions, there has been great disturbance of the digestive organs, very small doses of ipecacuanha may be alternated with the above.

The savine is also found useful in various chronic diseases of the female genital organs, connected with vascular and secretory torpor, especially in passive hæmorrhages and leuchorrhœa. In the same way it is of good service, conjoined with mechanical means, in prolapsus uteri consequent upon frequent or difficult labors and abortions. — *Zeitochrift für Gerburtkunde, Band xxxri;* and *Brit. and For. Med. Rev.*

Treatment of Puerperal Fever. By E. Murphy, M. D. —[As a general rule we avoid the republication of the routine lectures which are now so commonly committed to the pages of the weekly journals, but puerperal fever is a disease of such moment, and it is so important to the practitioner to have the most enlightened views on the subject of treatment at his "fingers' ends," as it were, that we offer no apology for departing from our usual custom. After an admirable history of the various types of childbed fever, their symptoms and pathology, Dr. Murphy thus proceeds:]

The treatment of puerperal fever must be considered in reference to the views of the malady above stated. It divides itself into two questions: First, the prophylactic treatment. In discussing this question, I must ask the reader to assume with me that it is contagious. If it be

not, precaution taken can do no harm. On the other hand, if contagious, the neglect of such means of prevention would do infinite mischief. We have already alluded to the rapid diminution and ultimate disappearance of puerperal fever in the Dublin Lying-in Hospital, when Dr. Collins put into force active sanatory measures. The chief agent employed by him was chlorine. Dr. Routh gives an interesting account of the means adopted by Dr. Semelweiss, for preventing the spread of the disease. "He recommended all students frequenting the division (the labor-wards) not to handle dead matter, or if they did, he forbade them to make any examination till the following day. In the second place, he directed all the students who attended the practice of the division *to wash their hands in a solution of chlorine prior to and after every (vaginal) examination made on the living subject.* The result of these precautionary measures was that the number of deaths at once fell to seven per month." They had been from 30 to 40 per month, and we can assign no other cause for this great difference of mortality than the means used by Dr. Semelweiss for preventing the communication of the disease. The prophylactic was chlorine, and hence, comparing the facts stated by Dr. Collins with those of Dr. Semelweiss, this gas seems to have the power of destroying the poison. In order, therefore, to prevent the diffusion of puerperal fever, chlorine is essential. Solutions of it should be freely used, the hands washed, and the sheets of the bed sprinkled with it, even at the risk of damaging the texture. The vapor of chlorine should also be diffused through the apartment. I am inclined to think that the chlorates of soda or potass taken internally would be useful on the same principle. Besides these means the practitioner should also be careful, if in the attendance of a case of puerperal fever, to change his dress before he visits another patient in labor. The fomites of the fever have been known to lurk about the dress of the attendant, and produce it after a period much later than might be imagined. In one ward of the Dublin Lying-in Hospital the fomites remained for months, and renewed the disorder. If proper precautions are used, I am satisfied that there is no danger of communicating puerperal fever; but I fear in some instances a want of caution has had this effect. The practitioner may have been led astray by the

theorist, who tells him that puerperal fever is nothing but a local inflammation, which we know is not contagious; or he may imagine there is no risk because some of his patients may have escaped contamination. Errors of this kind, we have reason to think, have led to the dissemination of poison, and should be carefully guarded against.

The remedial treatment has been a warm subject of controversy, chiefly arising from the different views of the disease that have been advocated. Those who hold the doctrine of local phlegmasia defend an active antiphlogistic treatment; while the advocates of the epizootic character of puerperal fever maintain the importance of supporting the constitution against the attack. It appears to us that the treatment of both, to a certain extent, is correct, although the principle on which the antiphlogistic plan is founded we believe to be erroneous. Depletion, purgatives, emetics, certainly reduce inflammation, because they diminish the quantity of the blood and the velocity with which it is impelled by the heart; but the very same means, by lessening the quantity of poisoned blood, and by acting as evacuants to discharge a poison from the circulation only, renders the blood more pure and less dangerous than it was before. These remedies are beneficial, therefore, not as antiphlogistics, but as antiseptics. If we act on such a principle the only question we have to decide is—can the patient bear the treatment? Has the constitution sufficient power to recover itself from the loss occasioned by the treatment when it is already prostrated by the influence of a poison? We believe that this question will admit of no general answer; we can only speak with a special reference to the constitution and the conditions in which it is placed. If the dose of poison be excessive, evacuants are inadmissable, because the constition has no power, no action. On this principle we object to depletion in Armstrong's "congestive disease," and consider Mackintosh's doctrine of "latent peritonitis" altogether fallacious when applied to puerperal fever. If but little be absorbed, and the prominent symptoms are of a sthenic character, evacuants are the most efficient, because the poison is rapidly removed, any local inflammation is promptly subdued, and the constitution soon recovers itself. Between these extremes there is every shade of intensity in the disease, which almost renders each

case a separate subject of consideration. In some the evacuant treatment, in others the stimulant, is successful. In those situations where the poison is concentrated, as in hospitals, or in places where it suddenly appears and commits great devastation, we think that the stimulant practice is most advisable. The remarkable success of Dr. Copland's practice in the Queen Charlotte's Hospital is a sufficient illustration of this truth, and may be contrasted with the failure of Armstrong's treatment in the Dublin Lying-in Hospital, about the same period. On the other hand, when the poison is diffused, as in private practice, evacuants may be employed with advantage; at the same time, it is right to observe that the natural strength of the patient's constitution forms an important element in determining this question. It is very well known that the strength of constitution varies with the locality. The inhabitants of London, for instance, do not bear the same activity of antiphlogistic treatment as those of Dublin or Edinburgh. The residents of a country district, breathing a purer air, and enjoying active exercise, or occupied in rustic duties, have stronger constitutions than citizens; and thus, when we would wish to form a fair estimate of any proposed treatment by the evidence of its success which is adduced, it is very important to inquire where the cases treated have lived. Dr. Gordon's and Mr. Hey's were chiefly rural practices. Dr. Armstrong's and Dr. Mackintosh's were scattered over a town; and although each met with cases of intense puerperal fever, they were exceptions, not the rule; we have every reason to think that their "clientelle" consisted of patients with naturally strong constitutions that would admit of free evacuation. You may meet, however, and in cities often will meet, with patients whom you cannot bleed, and who require stimulants; we cannot, therefore, lay down a general rule, unless it be that of Sydenham—"to study the constitution of the year," and we would add, "of the place." Having premised these general observations, we shall proceed to consider separately the remedies usually employed; and first, with regard to the evacuants.

Depletion is more generally employed than any other mode of treament. Dr. Ferguson, after a most careful and cautious inquiry, gives the following as the sum of his experience of bleeding as a remedy in puerperal fever:

"Of all the means we possess of arresting this malady, I believe bleeding, general or local, to be far the most extensively applicable. The cases in which it is not so are exceptions to the rule." We fully agree in this opinion, but we do not consider depletion efficacious because it is antiphlogistic, but because it is a most rapid evacuant. On this principle alone can we explain the efficacy of the very bold depletion sometimes employed. We do not treat peritonitis by taking away large quantities of blood; and there are some forms of it in which we cannot bleed at all. Yet in puerperal fever Hey took twenty, thirty, even fifty ounces of blood from the arm. Mackintosh says—"In some fortunate cases, the histories of which were lost in my travels, I can well remember abstracting forty and fifty ounces at one bleeding." In order that depletion be efficient it should be promptly undertaken the the moment that a rigor gives evidence that the poison is absorbed; the removal of blood then is attended with the best effects; but at a later period, when time is given to alter its properties, and to soften the tissues, when effusions take place, depletion has a contrary effect; the strength of the patient at once gives way, and death rapidly follows. Such we believe to be the principle on which depletion, when it may be adopted, is useful; but you must always bear in mind that it may be quite inadmissible; you must carefully inquire into the character of the epidemic, the constitution of your patient, and, as I have said, the constitution of the place. If you seek among the symptoms for a guide to determine your practice, I know of none we can depend on but the pulse, and even that is uncertain. If the pulse be firm and wiry you may bleed, but if it be compressible and unsteady you cannot do so. In the former case the constitution is struggling against the disease, and manifests a degree of vigor that will admit of depletion. In the latter, it is rapidly giving way under the attack, and depletion only hastens debility and its consequence, death; but although this is generally true there often exceptions in both cases which may deceive you. Depletion, therefore, sometimes must be tried as an experiment, and, if so, should be had recourse to as soon after the rigor as possible; at a later period it should never be employed. In hospital practice, and with women in the lower walks of

life, who have been subjected to privations or causes of mental depression, we would not think depletion advisable.

Purgatives, also, act as evacuants, and those that have had the most power in this respect have always been the most efficient. The hydragogue catharics, which produce the most rapid and abundant discharges from the intestins, are preferred. The object is not merely to unload the intestines, but to produce catharsis. In one case, Dr. Armstrong having taken twenty-four ounces of blood from the arm, so as to induce fainting, gave a scruple of calomel and two ounces of strong infusion of senna, containing two drachms of sulphate of magnesia, every hour till copious evacuations should be produced. "In about four hours the medicines began to operate, and several copious, dark fetid stools were discharged; from that time considerable relief was obtained, and a regular perseverance in purgatives, with mucilaginous drinks, and a small quantity of exceeding weak chicken broth, completed the cure in five days." This, certainly, is not the treatment of peritonitis. If this active practice overcame the constipation that attends this inflammation, it would have the effect, not of reducing, but of greatly increasing it; but as a means of purifying the blood, by exciting an active secretion from the intestines, the practice is intelligible.

Emetics were among the first remedies discovered for the treatment of this disease. In 1782, Doulcet at once checked the progress of this distemper by the free use of emetics; the hint was given him by nature herself; one of his patients, who had been just attacked, made several efforts to vomit; he gave her a large emetic, which proved salutary. He continued them, and she recovered. This practice was repeated in every case, and with such remarkable success that it was supposed Doulcet had found a specific; a second visitation, however, afterwards presented itself, and Doulcet's specific was found to be of no use. Richter, Tonnellé, and Cruveilhier, also found emetics, in some cases, very useful. This practice, then, fails in some instances and succeeds in others. Can any reason be assigned for this difference of success? Dr. Ferguson, we think, has given the true explanation. Emetics are efficient "when the violence of the malady has fallen on the liver especially, and when there is early nausea

and spontaneous vomiting." "In puerperal fever I have already noticed the frequency of nausea, biliary derangement, dusky staining of the skin, and jaundice; and it must not be forgotten that Gaspard and Cruveilhier have proved that one of the modes by which infection of the blood is relieved is through the liver. On these grounds, and within these limits, the use of emetics will be found rational and beneficial."

Diuretics have received very little attention in the treatment of puerperal fever; yet, as evacuants, I believe them to be very efficient. In some cases I have found the free use of nitrate of potass of great value; and although as yet my experience of it as an evacuant in puerperal fever is too limited to speak with sufficient confidence, I am inclined to think that it is well worthy of a more decided notice from the profession. Its action may be explained on the same principle as emetics—the infection of the blood being relieved through the kidney in place of the liver.

Mercury is the only medicine that may be considered strictly as an antiphlogistic, and it is the only remedy of doubtful efficacy. Patients have been salivated with mercury, and no remission of the symptoms followed. Dr. Ferguson says—"With regard to the use of mercury in puerperal fever, I think that as a purge it may be used in all the forms with advantage, but not as a means of affecting the constitution." Dr. Collins used mercury in combination with ipecacuan in large doses, four grains of each, every second, third, or fourth hour. In other instances, he gave a scruple of calomel every second or third hour. "One patient took more than an ounce." Dr. Collins further remarks—"I could not observe any better effect from the large doses than the small; the system was not more speedily influenced; and when they did so act, it was often with violence, so as to endanger the destruction of the soft parts about the palate." In a note he observes—"It is supposed by some practitioners that when we can get the system under the influence of mercury recovery is certain. This is not the fact, as I have seen several cases, where death took place under these circumstances. It is, notwithstanding, a very favorable occurrence." Mercury, therefore, seems to be the least efficient of the remedies employed.

Antimonials have been also employed. Boer used an unknown preparation extensively in the Vienna Hospital. Dr. Gooch supposed it to be "Kermes mineral;" Dr. Ferguson, "James's powder." Its action was chiefly on the skin, and was found to have a most beneficial effect. Dr. Denman derived considerable advantage from tartar emetic in the treatment of puerperal fever, acting both as an emetic and in increasing the action of the exhalants.

In the treatment, then, of puerperal fever by evacuants, the first question to decide is—Can the patient bear any evacuation? The extreme degree, the ataxic form of the fever, admits of none. In the less severe varieties we may use some one or other of them, and it only remains to determine which we shall select. If the pulse justify depletion, it is the most efficient when promptly adopted. Active saline purgatives may also be used in such cases with advantage. In more severe cases the lancet may not be employed, and yet other evacuants may be useful, which Nature herself will sometimes indicate. The fever may commence with an attack of diarrhœa, and if, in place of checking it, we rather maintain the evacuation, the patient will recover. Bilious vomiting taught Doulcet the value of emetics, and so, with regard to the efforts to throw off the disease by other channels, the symptoms will point out the treatment. There are cases, however, in which no evacuation dare be attempted,—in which stimulants alone will save the patient; and when this course is pursued it must be a bold one—a hesitating practice is perfectly useless. Dr. Copland gave from eight to sixteen grains of camphor every four or five hours. On the same principle opium may be given to any extent short of narcotism; but by far the most efficient stimulant is turpentine, because it combines in itself a double power. It supports the constitution, or rather rouses its energies against the poison, while it acts as an evacuant in removing it. Turpentine may be combined with castor-oil, in half ounce doses, and given every three or four hours with great advantage. As a local application, also, it contributes greatly to relieve the abdominal pain which the patient experiences. With regard to this medicine, I have no hesitation in stating, with Dr. Copland, that "*there is certainly no remedy so efficacious as a decided and judicious use of spirit of turpentine.*" With

these observations we shall conclude the discussion of this perplexed subject, fully aware that in our attempts to unravel some of its difficulties we originate new questions for discussion and controversy. If, however, we have succeeded in rendering intelligible the principles upon which it appears to us the the most efficient plans of treatment have been successful, our object has been fully accomplished.—*Medical Gazette.*

A Japanese Remedy for Sterility. By Dr. E. Williams. —[Dr. Williams believes there is a botanical remedy in Japan and China which exerts a specific influence upon the uterus, more particularly in cases of sterility and checked menstruation. The tree is one of the order Ternstromaceæ of Jussieu, growing to the size of the English laurel, with leaves somewhat larger than the congou tea, and the odor resembling pulegium and sabina.]

The mode of preparation is to take a quantity of the leaves, macerate them in as much rice-spirit (samshu) as will just moisten them for six hours; then express and give about a teaspoonful every hour, and two or three doses will invariably bring on the menstrual secretion, which can be maintained by a dose or two daily for any length of time.

Females in the healthy state are expected to menstruate in their eighth year in Japan and China, and should they not do so they are inelligible for betrothal; therefore recourse is had to the *key tu sing* with certain results.

To ensure its success, according to popular belief, the leaves must be gathered by a virgin, the while using certain cabalistic formulæ, at the full of the moon, and during the burning of a certain number of highly perfumed jop-sticks.

When required for the purpose of obviating sterility, the tree must be in its second year, and also be gathered with certain prescribed formulæ at the wane of the moon, and equal parts of the root must be added to the preparation, which is made in the same manner as the preceding receipt.

That the root is aphrodisiac in its effects I have not the slightest doubt, as I have administered it to animals with obvious results, and without any ill effects even to mules and castrati.—*Lancet.*

Indian Hemp as an Oxytoxic. By Dr. Simpson, Edinburgh.—Dr. Simpson stated, that, in the early part of the winter session, he had given Indian hemp (Cannabis Indica) in several cases of tedious labor, with the view of ascertaining if it possessed any oxytoxic effect (like ergot of rye) in increasing and exciting the parturient action of the uterus. He had been induced to try the effects, if any, of Indian hemp during labor, in consequence of Dr. Churchill stating, that it possessed powers similar to those of ergot of rye in arresting hemorrhage, when dependent upon congested states of the *unimpregnated* uterus. In the few cases of labor in which it was tried, parturient action seemed to be very remarkably and distinctly increased after the exhibition of the hemp; but far more extensive and careful experiments would be required, before a definite opinion could be arrived at relative to its possession of oxytoxic powers, and their amount.—*Monthly Journal.*

REVIEWS.

ART. I.—*History of the Strange Sounds or Rappings, heard in Rochester and Western New York, and usually called the Mysterious Noises, &c.* By D. M. DEWEY, Rochester, 1850.

Exposition of the Rochester Knockings. By AUSTIN FLINT, M. D., CHARLES A. LEE, M. D., and C. B. COVENTRY, M. D. Buffalo Commercial Advertiser, Feb. 17th, 1851.

The newspaper press has teemed for many months past with marvelous accounts of strange noises, heard in various towns of western New York and held by the superstitious to be connected with the spiritual world. These narrations have excited the most intense interest in the popular mind. Persons from all parts of the country have visited Rochester to listen to the mysterious rappings, and have given to the public the most wonderful descriptions of what they saw and heard. Mesmerism has been thrown into the shade; the feats of the "Phreno-Magnetisers" have been beggared by the exploits of the Rochester "witches." Hitherto we have refrained from all notice of this affair, because we felt satisfied that it was a delusion, and that in time it would meet with a just exposure. An exposition of the mystery has been made, and we purpose now, with the explanation, to give a brief history of the imposture. In doing so, let us not be accused of traveling beyond the bounds of our profession—our readers will see, before we are done, that the subject

is one which comes legitimately within the province of physiology.

The females who have attracted so much attention are Mrs. Fish, a widow, and Miss Margaretta Fox, and Miss Catherine Fox, her sisters, young girls, aged, one fourteen and the other sixteen years. They have been considered respectable people. At first, their exhibitions were free to all the curious, but for some time past they have been perambulating the country fleecing the gullible of their dollars. In the house of their father, Mr. John D. Fox, the noises were first heard about the latter end of March, 1848, one evening after the family had retired for the night. They seemed to be in one of the bedrooms, and sounded as though some one was knocking on the floors, moving chairs, etc. A perceptible jar was felt by the persons present when their hands were placed on the furniture in the room, and was also experienced by them as they stood on the floor. This has been constantly observed ever since in all the exhibitions of these wonder-mongers. The Rev. C. Hammond, of Rochester, undertook to investigate the strange phenomena, and the following is an extract from his letter describing the manifestations of one evening:—

"On taking our positions the sounds were heard, and continued to multiply and become more violent, until every part of the room trembled with their demonstrations. They were unlike any I had heard before. Suddenly, as we were all resting on the table, I felt the side next to me move upward—I pressed upon it heavily, but soon it passed out of the reach of us all—full six feet from me, and at least four from the nearest person to it. I saw distinctly its position—not a thread could have connected it with any of the company without my notice, for I had come to detect imposition, if it could be found. In this position we were situated, when the question was asked, "Will the spirit move the table back where it stood before?"—And back it came, as though it were carried on the head of some one, who had not suited his position to

a perfect equipoise, the balance being sometimes in favor of one side, and then the other. But it regained its first position. In the mean time the "demonstrations" grew louder and louder. The family commenced and sung the "spirit's song," and several other pieces of sacred music, during which accurate time was marked on the table, causing it to vibrate—a transparent hand, resembling a shadow, presented itself before my face—I felt fingers taking hold of a lock of hair on the left side of my head, causing an inclination of several inches—then a cold, death-like hand was drawn designedly over my face—three gentle raps on my left knee—my right limb forcibly pulled, against strong resistance, under the table—a violent shaking, as though two hands were applied to my shoulders—myself and chair uplifted and moved back a few inches, and several slaps, as with a hand, on the side of my head, which were repeated on each one of the company, more rapid than I could count. During these manifestations, a piece of pasteboard, nearly a foot square, was swung with such velocity before us as to throw a strong current of air in our faces—a paper curtain attached to one of the windows was rolled up and unrolled twice—a lounge immediately behind me was shaken violently—two small drawers in a bureau, played back and forth with inconceivable rapidity—a sound resembling a man sawing boards, and planing them, was heard under the table—a common spinning-wheel seemed to be in motion, making a very natural buzz of the spindle—a reel articulated each knot wound upon it, while the sound of a rocking cradle indicated maternal care for the infant's slumbers. These were among many other demonstrations which I witnessed that evening, amid which I felt a perfect self-possession, and in no instance the slightest embarrassment, except a momentary chill when the cold hand was applied to my face, similar to a sensation I have realized when touching a dead body. That any of the company could have performed these things, under the circumstances in which we were situated, would require a greater stretch of credulity on my part, than it would to believe that it was the work of spirits. It could not, by any possibility, have been done by them, nor even attempted, without detection. And I may add, that near the close of the demonstrations at this visit, there was a

vibration of the floor, as though several tons in weight had been uplifted and suddenly fallen again upon it. This caused everything in the room to shake most violently for several minutes, when the force was withdrawn."

The reader will bear in mind that this is the grave statement of a serious man who writes like a scholar. He is accredited a man of veracity or his letter would not have been published, and it is manifest that he is fully persuaded of the reality of what he saw, as well as that all the commotion in the room was the work of "spirits."

The following colloquy is reported as having taken place between the "spirits" and a Mr. "P.," who had frequently been present at the performances of the witches:

"At one time, when some of these sounds had been unusually loud, I inquired the object of them. The answer was, "To convince you." I said, "You cannot be spirits, for according to my theory, spirits can pervade matter, and pass through it, but cannot move it, and handle it, as this table has been moved." Reply. "You are mistaken: we can and do affect matter at our will." "I have heard it said that you sometimes manifest yourselves to persons as by the touch of the hand, etc. Is it so?" "It is." "But it is said that you make such manifestations in the dark only; this leads to suspicions, with all the precaution that can be taken. Why not do this in the light?" "Because, that in such manifestations we assume a material form, and it would frighten. We do not wish to alarm, but to convince."

By the agency of these "spirits," a father and mother were permitted to converse with a departed child; a brother talked with his sister about the disease of which "her body died;" a man was told his age, his wife's age, "and that of every child in his family correct to a day, a thing he could not do himself," etc. On one occasion a gentleman fancied that he might catch Miss Fox by a trick. "So he thought of the name of a young lady who had been dead for several years. He asked if the "spirit" would rap on his touching the point of his pencil upon

the name he was thinking of, provided he would write down ten names, and that among the ten." There was an affirmative reply. Ten names were written, but the name of the young lady was not among them. He went through the list, pointing at them successively; but there was no rap. The company seemed much astonished. He then added two more names, one being that of the young lady, "and as quick as he touched it, there came a rap." He then asked it (*mentally*, it is reported) "to spell out the name he thought of, and it spelled out the name of the young lady."

But enough. We must not trespass too far upon the patience and good nature of our readers, but we beg leave respectfully to submit to them, whether *clairvoyance* or *prevoyance* furnishes among their marvels anything more wonderful than this? And now let us see what becomes of it all.

The Rochester sorceresses had begun to turn their art to a good account. They had just concluded a profitable exhibition in the city of N. York, and had gone to Buffalo to turn the city upside down. Our friends, Professors Flint, Lee, and Coventry, of the University of Buffalo, were led by curiosity to visit their room, and while watching their movements discovered a clue to the mystery. They saw from the countenance of Miss Fox that the sounds were due to her agency, and that they involved an effort of the will. In fine, they became satisfied that they were produced *by a partial dislocation of the knee joint*, which the young woman was able to effect at pleasure. Resting her foot upon a solid support, she was able to displace the tibia, which was attended by a loud noise, and the return of the bone to its natural position gave rise to a second sound. It was a singular coincidence that furnished the gentlemen with the means of demonstrating the correctness of their explanation. After they had arrived at their conclusion, they met with a highly respect-

able lady in Buffalo, who, by this motion of the tibia upon the femur, can "develop sounds similar both in character and degree to those professedly elicited by the Rochester impostors from the spiritual world."

One would suppose that this would have put an end to the imposture, but the spirits were not to be laid so easily. Mrs. Fish and Miss Fox appeared next day in a "card," denying that they were impostors, and bantering their accusers to make trial of the truth of their theory. Accordingly an investigation was undertaken, the result of which is given in a letter from Dr. Lee to the editor of the New York *Tribune*, which was published on the 25th of February. Dr. Lee, in company with his colleagues, Dr. Flint, and Dr. Coventry, attended at the rooms of the ladies on the evening of the 18th of that month. Besides these gentlemen, some eight or ten individuals, including three ladies, friends of the "witches," were present by invitation. The preliminaries being arranged, it was asked whether the "spirits" would be present and communicate with the committee through the evening. After an interval of a minute or so, says Dr. Lee, raps were heard and continued in quick succession for some time, which Mrs. Fish declared to be an affirmative answer. This was repeated, so that there would be no mistake as to the willingness on the part of the "spirits" to accommodate the gentlemen.

This being fully understood, the ladies were requested to be seated on chairs, their limbs extended, and their heels resting on cushions, in which position, without a solid support to serve at once as a *fulcrum* and a medium for conveying the vibrations, it was evident, if the theory proposed was sound, there could be no noises produced. The witches remained fifty minutes in this position, during which time *no raps were heard*, though the "spirits" were urged to manifest themselves; but the moment the ladies

placed their feet on the floor the knockings commenced and continued for several minutes.

But there was still another test to which the necromancers were doomed to be subjected, and this we give in Dr. Lee's own words:

Seating ourselves before the ladies, we grasped each of their knees firmly, so as to prevent any lateral movement of the bones; the "raps" immediately ceased, and were not heard while the knees were thus held, except near the close of the experiment, which continued once forty minutes, when two slight sounds were heard, on slightly relaxing my grasp, while at the same time I distinctly felt the heads of the bones grating on each other, and the muscles contracting, which, though a very positive kind of evidence to me, I am aware is not so satisfactory to bystanders.

Some times, in the course of the trial, the hands of the operators were released, and raps "were always heard during the interval of removal." At the close of the sittings, we are told by Dr. Lee, Miss Fox was much affected, and shed many tears, which excited much sympathy on the part of some of the gentlemen present.

What plea will the "witches" and their allies, the *clairvoyants*, set up? How will they account for their failure to evoke the "spirits" when their knees were held? Will they allege, as we have heard mesmerisers do, when the bandage was drawn a little too securely over the eyes of their subjects, "that the pressure disturbed the magnetic influence?" Or will they say, as a witty friend of ours suggests, "that the modest 'spirits' were frightened away at seeing the hands of the doctors on the ladies' knees?"

If we are not mistaken, there is a lesson taught by this imposture, which will not be without its effect. Here we have seen done by alleged "spiritual agency," all that is professed to be done by the subjects of clairvoyance, and after all it turns out that the revelations which have so astonished preachers and editors, and made multitudes

stare wherever they have been reported, come from a clever girl's knee joint. If clairvoyance is able to hold up its head for a good while after such an exposure, we confess it will surprise us.

This Rochester imposture has been productive of much mischief; more than one individual has been driven by it to madness. A murder and a suicide have been traced to its baleful influence. The editor of the *New York Medical Gazette* mentions a case of insanity which had just occurred in that city, "by reason of the revelations made by mysterious raps, that the steamship Atlantic had been wrecked, with the loss of all on board." Among the passengers whose "spirits" were declared to have made the rapping, one has arrived at home "to find his wife a maniac, from a belief in these ghostly knockings." Mesmerism is not less pernicious. The editor mentions the case of another female who "has just been sent to the asylum, by reason of mesmeric operations upon her nervous system, avowedly for the purpose of rendering her clairvoyant, but with the effect of dooming her to lunacy. "And," he adds, "these recent instances are not mere isolated cases, for in several of the asylums the victims of these kindred impostures are hopelessly insane."

We have adverted to this subject in the hope of exciting the profession to a more united opposition to the host of impostures with which our land is infested. Physicians are the constituted guardians of the public health. They are expected to give direction to popular opinion on all matters relating to the human economy. Few of them, it is pleasant to know, were made dupes to the Rochester imposition, as few, compartively, have embraced the absurdities of mesmerism. While one, here and there, has been found with credulity sufficient to swallow all the monstrosities of clairvoyance, the great body of the profession has listened to its reputed miracles with becoming indifference. Medical men, accustomed as they are to the in-

vestigation of physical phenomena, ought to be the last, and as a general rule they have been the last, to fall into the wiles of impostors. The physiological peculiarity in the case of Miss Fox is interesting, and, from the fact that it has been found to exist in another lady in a neighboring city, is probably not so rare as might have been supposed. It is altogether probable that we shall now hear of many analogous instances.

Art. 2.—*United States Exploring Expedition, during the years* 1838, 1839, 1840, 1841, 1842, *under the command of Charles Wilkes, U. S. N.* Vol. ix.

The Races of Man, and their Geographical Distribution. *By* Chas. Pickering, M. D., member of the scientific corps attached to the Expedition. Boston: Charles C. Little & James Brown.

The Races of Men: A Fragment. By Robert Knox, M. D., Lecturer on Anatomy, and corresponding member of the National Academy of Medicine of France. Philadelphia: Lea & Blanchard.

The New Englander—1850.

The North American Review—1850.

The Doctrine of the Unity of the Human Race examined on the principles of Science. By John Bachman, M. D., Professor of Natural History, College of Charleston, S. C.

There are few questions presented to the investigation of the explorer of nature, of greater importance than those comprised within the science of Ethnology. The profound depths of that science contain intellectual treasures of the highest value, and the farther the subject is penetrated the more we feel its value. The origin and destiny of the human race have ever been themes of momentous importance, and will continue to be until "corruption has put on

incorruption." All philosophy, all truth, all of earthly interest, have these questions for their nucleus. The loftiest intellect known to pagan philosophy struggled first to find the KNOWN, and from that to reach after the unknown. Those who may freight their memories with Mr. Grote's full, perfect, and massive sketch of Socrates, will be at no loss to find how much of the labor of that high intelligence was devoted to the origin and destiny of the human family. And now, after two thousand years have rolled their terms since the Athenians heard philosophy from the voice of their greatest intellect, the question of the origin of man, is yet a matter of debate. Between the supposed conflicting elements of science and revelation the subject has reached a state of entanglement that might have gratified Berkely, of Cloyne, Hobbes, or Hume. Science is widening its domains, and bringing many wholesome and vital truths home to the interests of every day life, but there are many who feel alarm at the corresponding fact, that efforts are constantly made to narrow down the possessions of Revelation, until what is left is scarcely worth retaining. Moses is a myth, his statements preposterous, and his institutions are denounced as being in the very spirit of their age, by persons who can find no antiquity equal to them. The loftiest inspirations of the Hebrew prophets are referred to as the distempered ravings of Jewish rhapsodists, and the Christian Dispensation is made to hang upon a reference to it by Josephus, by men who unhesitatingly credit Thucydides, whose history makes no mention of Socrates, who was the most notable man of the period, pourtrayed by the historian.

In the investigation of the origin of man, it is impossible to proceed without reference to the Bible. The question of the origin of the human race is indissolubly connected with its destiny, and if the origin of man is to be decided by science without the aid of revelation, what is to be the fate of the more important branch of the subject—the des-

tiny of man? What does, what can science propose to do with that?

We do not design to enter upon an elaboration of the subject of Ethnology at present, but shall be content to submit a summary of the present position of the investigation. The North American Review, for January, 1851, in a notice of "the tendency of modern science," says, rather flippantly: "last year, when Agassiz announced the discovery of his science, that the races of men could not have been derived from one earthly parentage, a feeble outcry from very feeble voices rose, or strove to rise upon the air; but there came back no echo from public opinion, and it has already died away." Can it be that the North American Review has been the victim of anæsthesia? Are the voices of Dr. Bachman, and of the Reviewer in the New Englander of Professor Agassiz' doctrine, what the North American Review ranks among the feeble things of this world? Has there indeed been no echo from public opinion? The Review says "*it* has already died away," and we are at a loss to know what he means; we know not whether he tries to say the public opinion which gave no echo has already died away, or that the echo which never had an existence, has died.

No one can hold the merits, the high and ennobling qualities of Professor Agassiz in higher estimation than we do. In his departments of natural science, he has, perhaps, no equal, certainly no superior. We have given his prelections on the origin of man, all the careful, unbiassed study we were able to command, and without any response from his opponents we felt the conviction that he had failed to establish his doctrine. The necessity he feels for a separation of the questions, the unity and the origin of the race, shows the constraint that bound his intellect. The plurality of origins was not, as the N. A. Review says it was, a discovery of Agassiz' science, for it had been promulged long before geology came to light,

and long before the discovery of specific fauna and flora, the basis on which Professor Agassiz builds his superstructure. The representative species of particuliar localities is insisted upon by Professor Agassiz, and he handles the argument with boldness and power. But as a man is a cosmopolite, in the largest sense in which that term can be applied to a living being, the analogical bearings derived from representative species of fauna and flora are not very perceptible.

The errors of chronologers have done much towards the creation of false issues on geological and ethnological subjects. A great deal is assumed, we think, when an attempt is made to establish any certain and indubitable basis for the age of the world upon the Mosaic records. The origin of man is developed, without any attempt to fix the time of that origin. That the human race has been on the globe a much longer time than chronologers assume in their calculations, we think susceptible of a great deal of proof. That there is an inconsistency in the progress of civilization which all human records and all human experience show to be very slow; that stage of civilization clearly and abundantly proved to be in existence, according to the earliest human records; and the age of humanity, assumed by chronologers, must strike the attention of all who investigate the subject. For instance, how can we account for the culmination of Assyrian civilization, if chronology be infallible, by any thing we know of the progress of any nation since Christianity dawned upon the world? The conceptions formed by readers of history, of the height reached by the Assyrian empire, were of a lofty character, but their loftiest reaches did not approach the developments that have been established by the researches of Dr. Layard. He has shown that the farther he goes back among Assyrian monuments, the more proofs accumulate of a height of civilization beyond any conceptions that had been formed from written testimony.

This much we owe to natural research, but we feel that these facts have nothing to do with any standard by which Moses is to be tried. Moses is one person, Archbishop Usher, Sir Isaac Newton and all other chronologers are different characters. That the Mosaic account of the origin of the human race is true we are well convinced. No matter how many mysterious, inexplicable facts may exist around us, which no human science can explain or penetrate, we hold that man originated just as Moses has revealed that origin. Through all the haze that surrounds every department of ethnology, through all the clouds that lour over every point, there is one bold, certain and steady light that cannot be veiled, by any art, any science nor any philosophy. No age of civilization anterior to, or coeval with Moses, no one of the intellectual powers of Assyria, Egypt, Greece or Rome ever attempted to give a solution of what, except for Moses, would have been the most inexplicable problem on earth—we mean the gift of speech. If we lay aside the Mosaic revelation on the subject, and attempt to account for this possession, we have an enigma on our hands, of more difficult solution than any known to ethnology. In all others we may grope our way, this one completely stultifies the mind. Those who have never thought upon the subject have no idea of the difficulties that present themselves in an attempt to account for the possession of the power of clothing thought with language. This point, however, is clear and unquestionable—no human being ever spake, or uttered a thought in words except by imitation. There is not an instance on record that militates against this truth. All human experience, indeed, confirms it. No one ever talked, nor will any one ever talk except from being taught language by others. No one would be dumb but for deafness, and he that never heard others speak, cannot himself speak. We have three notable instances which speak intelligibly as to what would have been the condi-

tion of the first of the human race and of all their posterity if the first pair had not been taught speech in the only way in which it can be acquired—by hearing it. There is a young lady in this city who was able to talk up to between her third and fourth year. About that time she began to lose her hearing, and the progress of speech was checked. The defective hearing advanced until it terminated in total deafness, and in a short time she ceased to speak, because she forgot all words. Here is an instance then in which the faculty of speech existed once, while its possessor could hear, and which was completely obliterated by the loss of hearing. Some years ago, a young man, aged twenty-four, was examined by a commission of the French Academy. He had been deaf and dumb up to within four months of the time he appeared before the Academy. About four months prior to that time, he thought he felt something trickling from his ear, and upon applying his finger to it, discovered a few drops of a warm fluid. Coincident with this he heard a strange sound in his head, which he afterwards likened to the ringing of bells. The young man was overwhelmed with his sensations, but kept his newly acquired power a profound secret. He observed persons talking, and was amazed. He never had an idea on the subject until he was able to hear. During four months he kept his secret, but watched the use of speech by others in order to acquire the gift himself, and after a vigilance of four months he acquired confidence enough in his new power, to address his parents. There was certainly nothing to prevent this case from speaking, except the inability of the young man to imitate what he could not hear. The facts of this case are recorded by the French Academy after a rigid investigation of the subject.

Another remarkable case is one that occurred within the remembrances of many now living. We allude to Casper Hauser. He was born with full power of hear-

ing, but, for reasons that have never been revealed, he was confined for nearly seventeen years to a dark hole, and his keeper never uttered a word in the boy's presence. From this imprisonment, Hauser was conveyed in a wagon, by his keeper, to Nuremberg, and turned loose in the streets, the keeper making good his retreat. A merchant of Nuremberg took charge of the boy, for the purpose of educating him, and he rapidly acquired the power of speech after he was placed where he could hear it. He lived between sixteen and seventeen years without hearing a word, and he never attempted to utter one, but as soon as he was placed where he could hear speech he acquired the gift.

These are expressive facts—they speak no dubious language. If one man cannot originate language, it is plain that one hundred could not. Men may increase the powers of a language, but this is widely different from creating one. We know what wonderful powers the imagination has and its offices, but according to John Locke and David Hume, and all other reputable metaphysicians, the imagination has not a particle of creative power. Give it an idea, or a form to work upon, and it may weave it into ten thousand forms, but it can create nothing. Thus it is with the gift of speech—man has no creative power over it—after the elements are given to him, he can extend their boundaries to a wonderful extent, but at the start, he is dependent.

These truths, which cannot be controverted, indubitably show that Moses is the only historian of the human race who ever attempted to show where and how man obtained his power of speech. If the Creator of man had not conversed with him, and thus enabled him to use his powers of imitation, the human race would have been dumb to the present hour. And the revelation of this important event shows how infinitely much more Moses knew of what he speaks in the book of Genesis, than is

known among those who think themselves superior to him in more than "the learning of Egypt." In the midst of a cloud of tobacco-smoke, German philosophy teaches that Moses is a myth, but we have, in these remarks, shown that he revealed a truth, against which angry surges may beat in vain.

We yield to no one in our devotion to Ethnology in all its departments. We have cultivated it with all the power that we have been able to devote to it, and we feel the most fervent love for the whole science. But with all our love for it, we unhesitatingly declare that we would not exchange the satisfactory solution that Moses gives to the mystery of human speech for all that is known or imagined in Ethnology.

Having shown that Moses is far beyond all others in his account of the gift of speech, and that no one but the historian of the first pair on the earth ever pretended to account for the existence of that great element of human power, happiness, and progress, we think he may be trusted in other important elements of that early history. As he is rational and reliable in that important particular, and is the only one who claims any regard for the statement, he may be judged rational and reliable in those other statements where he stands alone, especially as there is nothing in the statements that are repugnant to reason.

It is of course impossible to elaborate the points we have introduced in these remarks, and our desire is rather to call the attention of medical readers to the subject of Ethnology, and to the best sources of information on that science, than to enter into a minute investigation of the various questions connected with it. The subject of Ethnology is of the profoundest importance to medical philosophers, and its elucidation must be, in a great measure, confided to them. We shall, on some future occasion, enter more fully into the merits of the questions of eth-

nology than we have been able to do in this number, and we shall be pleased if some of the correspondents of this Journal will give its readers an essay on the science.

Among the works named at the head of this article is Pickering's "On the Races of Man and their geographical distribution." The author, who is a physician, was a member of the scientific corps attached to the exploring expedition sent out by the Government of the United States. Dr. Pickering has made a work of great value, and deserves the thanks of all scholars for the important contributions he has made to progressive knowledge. The work is a worthy companion of Dana's Geology of the Pacific, and of Hales' Ethnography.

Dr Pickering says that he has seen eleven races of men, and is at loss, after having visited many different parts of the globe, to know where to look for other races, if the eleven he has seen are not the limit. Dr. Pickering thus distributes the characteristics of the eleven races: WHITE —Arabian and Abyssinian. BROWN—Mongolian, Hottentot, and Malay. BLACKISH-BROWN—Papuan, Negrillo, Indian or Telingan, Ethiopian. BLACK—Australian, Negro.

The geographical distribution of these eleven races of men is represented on a map which accompanies the work of Dr. Pickering. It is of great value to the inquirer after ethnological science, and we commend the work as one that is indispensable in the investigation of the important subject of which it treats. The following branches of ethnological science seem to us to be handled very satisfactorily in Dr. Pickering's work: 'Associations of the races. Their numerical proportions. Relations between the races. The geographical progress of knowledge. Migrations by sea. Migrations by land. The origin of Agriculture. Zoological deductions. The introduced animals and plants of America. The introduced animals and plants of the islands of the Pacific. The introduced animals and plants of Equatorial Africa. The introduced animals and plants of Southern Arabia. The

antiquities, and the introduced animals and plants of Hindostan. The Budhist caves. The Braminical caves. Domestic animals and plants of Ancient India. Introduced plants of Modern India. The introduced animals and plants of Egypt, enumerated in chronological order."

A careful study of the chapters of the work, we have thus indicated, will enable the student to place a proper value upon the claims of specific fauna and flora. Those claims have had a more conspicuous value placed upon them than they deserve, and the information imparted by Dr. Pickering forms an admirable sliding scale by which to measure the power of a number of points, that are pressed with ardor by the advocates of a diversity of origins for the races of man.

Upon the scientific department of the questions at issue, we commend Dr. Bachman's investigations. We have not had an opportunity of reading his book, but we have read the essays he has published in the Charleston Medical Journal, and those essays contain the facts, logic and principles set forth in the book itself. We have read Dr. Bachman's essays with more than ordinary satisfaction, and freely confess that they have considerably enlarged the boundaries of our knowledge.

We hope no one will so far misunderstand us as to suppose that we design in any of our remarks to use language in any degree derogatory to Professor Agassiz. We should do great injustice to our real feelings, if we were in any way to undertake to detract from his high merits. The views he has given of the races of man are those of an honest and unususally intelligent gentleman. They are supported with zeal, earnestness and power, but we have not been convinced of their correctness. There are few men, however, who may not afford to pause and reflect well before disagreeing with Professor Agassiz on any scientific subject, and we regret that we have not been able to reach the same conclusions that that eminent teacher has reached by his inquiries.

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DEMONSTRATIVE MIDWIFERY.

The readers of Medical Journals are familiar with the clamor raised about twelve months since, by a band of medical men, in Buffalo, New York, on the subject of Demonstrative Midwifery. After the trial of Dr. Loomis, for libel, a report of the trial was published and distributed among the medical profession, and a copy of the pamphlet fell into the hands of a captious correspondent of the American Journal of the Medical Sciences. This snarling critic holds that he has reached the ultimathule of obstetrical science, and that he is, not only consequentially, but consequently infallible. He gravely assumes that those who differ from him are necessarily in the wrong, and he boldly denounces Professor White for managing an obstetrical case in accordance with his own good judgment, and with many eminent authorities. We cannot understand how the captious gentleman to whom we refer, can reconcile his treatment of Professor White with the principles of any sound code of medical ethics known to medical men.

The able and worthy editor of the American Journal of the Medical Sciences has very properly repudiated the judgment of his correspondent, and acknowledges that Dr. White's treatment of his case was not open to the cavils of the critic. And the judgment of nine-tenths of the American medical profession, who have read the paltry diatribe of the Philadelphia critic, will find no difficulty in coming to the conclusion, that the critic in attempting to write down Professor White, succeeded admirably in writing himself down. While we look with regret upon any attempt on the part of medical men to put down a member of the profession for an honest discharge of his duties, we rejoice that Dr. White has been amply vindicated, and triumphantly sustained.

In a recent number of the Buffalo Medical Journal, Professor Flint